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Theoretical study of azido *gauche* effect and its origin

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Supplementary Information

Table of Contents

| | |
|---|-----|
| Tables S1-S18..... | S2 |
| Figure S1. Optimized structures of isomers which are viable only in solvents..... | S19 |
| Absolute energies and x,y,z coordinates of optimized structures..... | S20 |
| Gas-phase..... | S20 |
| CH ₂ Cl ₂ | S38 |
| DMSO..... | S59 |
| Water..... | S80 |

Table S1. Relative energies (ΔE), enthalpies (ΔH), free energies (ΔG), and free energies corrected for ΔS_{sym} and ΔS_{mix} (ΔG_{corr}) for ten conformers of diazidoethane in the gas-phase and in solvents (CH_2Cl_2 , DMSO and H_2O) and energy changes ($\Delta\Delta$ values) upon conformational isomerizations, obtained at the MP2/6-311++G(d,p) level. All values are in kcal/mol.

| Conformer | gas/ CH_2Cl_2 /DMSO/ H_2O | | | |
|---|---|---|---|---|
| | ΔE | ΔH | ΔG | ΔG_{corr} |
| <i>aaa</i> , C_2 | 1.84/2.30/2.45/2.46 | 1.91 /2.32/2.39/2.40 | 1.79 / 2.19 /2.07/2.06 | 2.20/2.60/2.48/2.47 |
| <i>aag</i> , C_1 | 1.80/2.11/2.22/2.23 | 1.97/2.22/2.27/2.27 | 2.06/2.20/ 2.04 / 2.04 | 2.06 / 2.20 / 2.04 / 2.04 |
| <i>gag</i> , C_2 | 1.70 / 1.85 / 1.91 / 1.92 | 1.93/ 2.05 / 2.04 / 2.04 | 2.81/2.81/2.57/2.55 | 3.22/3.22/2.98/2.96 |
| <i>gag</i> ⁻ , C_i | 1.76/1.91/1.99/2.01 | 2.01/2.11/2.11/2.11 | 2.47/2.47/2.26/2.24 | 2.88/2.88/2.67/2.65 |
| <i>aga</i> , C_2 | 1.49/1.13/1.06/1.05 | 1.61/1.13/0.99/0.97 | 1.90/0.90/0.86/0.86 | 2.31/1.31/1.27/1.27 |
| <i>agg</i> , C_1 | 1.74/1.12/1.01/1.00 | 1.88/1.21/1.04/1.02 | 2.11/1.34/1.00/0.98 | 2.11/1.34/1.00/0.98 |
| <i>ag</i> ⁻ <i>g</i> , C_1 | 0.13/0.10/0.14/0.15 | 0.22/0.14/0.12/0.12 | 0.39/ 0.00 / 0.00 / 0.00 | 0.39/ 0.00 / 0.00 / 0.00 |
| <i>ggg</i> , C_2 | 1.44/0.99/0.93/0.92 | 1.65/1.18/1.04/1.03 | 2.61/1.86/1.48/1.45 | 3.02/2.27/1.90/1.86 |
| <i>gg</i> ⁻ <i>g</i> , C_1 | 0.00 / 0.00 /0.04/0.05 | 0.00 / 0.00 / 0.00 / 0.00 | 0.00 /0.31/0.29/0.29 | 0.00 /0.31/0.29/0.29 |
| <i>ggg</i> ⁻ , C_1 | 0.26/0.02/ 0.00 / 0.00 | 0.42/0.12/0.03/0.02 | 1.32/0.83/0.55/0.53 | 1.32/0.83/0.55/0.53 |
| Isomerization | $\Delta\Delta E$ | $\Delta\Delta H$ | $\Delta\Delta G$ | $\Delta\Delta G_{\text{corr}}$ |
| <i>aaa</i> → <i>aga</i> | -0.35/-1.18/-1.38/-1.41 | -0.30/-1.19/-1.40/-1.42 | 0.11/-1.29/-1.21/-1.20 | 0.11/-1.29/-1.21/-1.20 |
| <i>aag</i> → <i>agg</i> | -0.06/-0.98/-1.20/-1.23 | -0.09/-1.01/-1.23/-1.25 | 0.05/-0.86/-1.04/-1.06 | 0.05/-0.86/-1.04/-1.06 |
| <i>aag</i> → <i>ag</i> ⁻ <i>g</i> | -1.67/-2.01/-2.07/-2.08 | -1.75/-2.09/-2.15/-2.16 | -1.67/-2.20/-2.04/-2.04 | -1.67/-2.20/-2.04/-2.04 |
| <i>gag</i> → <i>ggg</i> | -0.26/-0.85/-0.99/-1.00 | -0.28/-0.87/-1.00/-1.01 | -0.21/-0.95/-1.08/-1.10 | -0.21/-0.95/-1.08/-1.10 |
| <i>gag</i> → <i>gg</i> ⁻ <i>g</i> | -1.70/-1.85/-1.87/-1.87 | -1.93/-2.05/-2.04/-2.04 | -2.81/-2.50/-2.28/-2.26 | -3.22/-2.91/-2.69/-2.67 |
| <i>gag</i> ⁻ → <i>ggg</i> ⁻ | -1.50/-1.89/-1.99/-2.01 | -1.60/-1.99/-2.09/-2.10 | -1.15/-1.64/-1.71/-1.71 | -1.56/-2.05/-2.12/-2.12 |
| <i>anti</i> → <i>gauche</i> ^a | -1.70 / -1.85 / -1.91 / -1.92 | -1.91 / -2.05 / -2.04 / -2.04 | -1.79 / -2.19 / -2.04 / -2.04 | -2.06 / -2.20 / -2.04 / -2.04 |

^a Energy difference between the most stable $\text{CC}_{\text{gauche}}$ and the most stable CC_{anti} conformer (bolded numbers for each energy term).

Table S2. Contribution of various energy components to the total binding interactions between two $\text{N}_3\text{CH}_2\cdot$ fragments in diazidoethane and energy changes ($\Delta\Delta\text{E}$ values) occurring upon conformational isomerization.^a Data for 1,2-difluoroethane (DFE) are included for comparison.^b Values are in kcal/mol, obtained at the MP2/6-311++G(d,p) level.

| Conformer | $\Delta\text{E}_{\text{tot}}$ | $\Delta\text{E}_{\text{def}}$ | $\Delta\text{E}_{\text{int}}$ | $\Delta\text{E}_{\text{elstat}}$ | $\Delta\text{E}_{\text{oi}}$ | $\Delta\text{E}_{\text{disp}}$ | $\Delta\text{E}_{\text{Pauli}}$ |
|---|-------------------------------|-------------------------------------|-------------------------------------|--|------------------------------------|--------------------------------------|---------------------------------------|
| <i>aaa</i> | -115.76 | 33.19 | -148.95 | -147.21 | -151.59 | -66.53 | 216.38 |
| <i>aag</i> | -115.92 | 25.41 | -141.33 | -150.53 | -153.35 | -67.77 | 230.32 |
| <i>gag</i> | -116.08 | 17.39 | -133.47 | -153.37 | -154.27 | -68.61 | 242.78 |
| | <i>-117.06</i> | <i>16.10</i> | <i>-133.13</i> | <i>-146.20</i> | <i>-159.90</i> | <i>-67.73</i> | <i>240.70</i> |
| <i>gag</i> ⁻ | -116.01 | 17.21 | -133.22 | -153.73 | -154.59 | -68.20 | 243.30 |
| <i>aga</i> | -116.22 | 21.64 | -137.86 | -147.87 | -154.09 | -55.86 | 219.96 |
| <i>agg</i> | -115.98 | 20.16 | -136.14 | -150.40 | -154.47 | -62.10 | 230.83 |
| <i>ag</i> ⁻ <i>g</i> | -117.53 | 24.57 | -142.10 | -153.13 | -156.05 | -68.37 | 235.45 |
| <i>ggg</i> | -116.29 | 18.59 | -134.88 | -154.48 | -154.14 | -68.09 | 241.83 |
| <i>gg</i> ⁻ <i>g</i> | -117.62 | 17.57 | -135.19 | -153.92 | -157.16 | -71.50 | 247.39 |
| | <i>-118.88</i> | <i>17.29</i> | <i>-136.19</i> | <i>-148.16</i> | <i>-163.12</i> | <i>-71.24</i> | <i>246.33</i> |
| <i>ggg</i> ⁻ | -117.46 | 17.95 | -135.41 | -155.45 | -155.91 | -70.93 | 246.88 |
| <i>a</i> DFE | -97.82 | 10.31 | -108.13 | -148.82 | -155.48 | -25.50 | 221.67 |
| <i>g</i> DFE | -98.58 | 10.50 | -109.08 | -152.20 | -160.01 | -26.11 | 229.24 |
| Isomerization | $\Delta\text{E}_{\text{iso}}$ | $\Delta\Delta\text{E}_{\text{def}}$ | $\Delta\Delta\text{E}_{\text{int}}$ | $\Delta\Delta\text{E}_{\text{elstat}}$ | $\Delta\Delta\text{E}_{\text{oi}}$ | $\Delta\Delta\text{E}_{\text{disp}}$ | $\Delta\Delta\text{E}_{\text{Pauli}}$ |
| <i>aaa</i> → <i>aga</i> | -0.35 | -11.44 | 11.09 | -0.66 (20.9) | -2.50 (79.1) | 10.67 | 3.58 |
| <i>aag</i> → <i>agg</i> | -0.06 | -5.25 | 5.19 | 0.13 | -1.12 | 5.67 | 0.51 |
| <i>aag</i> → <i>ag</i> ⁻ <i>g</i> | -1.67 | -0.90 | -0.77 | -2.60 (44.1) | -2.70 (45.8) | -0.60 (10.1) | 5.13 |
| <i>gag</i> → <i>ggg</i> | -0.26 | 1.15 | -1.41 | -1.11 (50.7) | -0.13 (5.9) | 0.52 | -0.95 (43.4) |
| <i>gag</i> → <i>gg</i> ⁻ <i>g</i> ^c | -1.70 | 0.02 | -1.72 | -0.55 (8.6) | -2.89 (45.7) | -2.89 (45.7) | 4.61 |
| | <i>-1.87</i> | <i>1.19</i> | <i>-3.06</i> | <i>-1.96</i> (22.6) | <i>-3.22</i> (37.1) | <i>-3.51</i> (40.3) | <i>5.63</i> |
| <i>gag</i> ⁻ → <i>ggg</i> ⁻ | -1.50 | 0.69 | -2.19 | -1.72 (29.8) | -1.32 (22.9) | -2.73 (47.3) | 3.58 |
| <i>a</i> DFE → <i>g</i> DFE | -0.77 | 0.18 | -0.95 | -3.38 (39.7) | -4.53 (53.2) | -0.61 (7.1) | 7.57 |

^a $\Delta\text{E}_{\text{tot}}$ = total binding energy between two radical fragments, $\Delta\text{E}_{\text{def}}$ = deformation energy, $\Delta\text{E}_{\text{int}}$ = interaction energy, $\Delta\text{E}_{\text{elstat}}$ = electrostatic energy, $\Delta\text{E}_{\text{oi}}$ = orbital interaction energy, $\Delta\text{E}_{\text{disp}}$ = dispersion energy, $\Delta\text{E}_{\text{Pauli}}$ = Pauli repulsion, $\Delta\text{E}_{\text{iso}}$ = isomerization energy, $\Delta\Delta\text{E}$ values represent individual energy changes upon conformational isomerization. Values in italic are in H_2O . Values in parentheses are percentage contribution to all attractive interactions contained in $\Delta\Delta\text{E}_{\text{int}}$. ^bFrom ref. 3f. ^cCorresponds to the most stable CC_{anti} → the most stable $\text{CC}_{\text{gauche}}$ isomerization.

Table S3. Energies of vicinal hyperconjugative interactions between two N_3CH_2 fragments in 1,2-diazidoethane and their change upon conformational isomerization, estimated on the basis of second-order perturbative approach at the HF/6-311++G(d,p) level.^a Energies are in kcal/mol.

| Conformer | total | total _{gauche} | total _{anti} | $\sigma_{CH} \rightarrow \sigma_{CH}^*$ | $\sigma_{CN} \rightarrow \sigma_{CN}^*$ | $\sigma_{CH} \rightarrow \sigma_{CN}^*$ | $\sigma_{CN} \rightarrow \sigma_{CH}^*$ |
|---|--------|-------------------------|-----------------------|---|---|---|---|
| <i>aag</i> , C_1 | -20.27 | -3.92 | -16.35 | -3.19/-2.90/-3.12/-3.28 | -2.09/-1.77 | | |
| <i>gag</i> , C_2 | -20.06 | -3.74 | -16.32 | -3.34/-2.82/-2.82/-3.34 | -2.00/-2.00 | | |
| <i>gag</i> ⁻ , C_i | -19.98 | -3.76 | -16.22 | -3.01/-3.14/-3.01/-3.14 | -1.96/-1.96 | | |
| <i>ag</i> ⁻ <i>g</i> , C_1 | -21.46 | -3.94 | -17.52 | -3.29/-3.27 | | -3.88/-4.37 | -1.38/-1.33 |
| <i>ggg</i> ⁻ , C_1 | -21.69 | -3.69 | -18.00 | -3.49/-2.97 | | -4.32/-4.59 | -1.25/-1.38 |
| <i>gg</i> ⁻ <i>g</i> , C_1 | -21.62 | -3.69 | -18.93 | -3.28/-3.23 | | -4.47/-4.51 | -1.21/-1.23 |
| Isomerization | | | | | | | |
| <i>aag</i> → <i>ag</i> ⁻ <i>g</i> | -1.19 | -0.02 | -1.17 | | | | |
| <i>gag</i> → <i>gg</i> ⁻ <i>g</i> | -1.56 | 0.05 | -1.61 | | | | |
| <i>gag</i> ⁻ → <i>ggg</i> ⁻ | -1.71 | 0.07 | -1.78 | | | | |

^a Individual interactions correspond to *anti* vicinal hyperconjugation. Total_{anti} is the sum of six interactions between *anti*-related σ -bonds. Total_{gauche} is the sum of twelve interactions between *gauche*-related σ -bonds. Total is the sum of all vicinal hyperconjugations, that is total_{anti} + total_{gauche}.

Table S4. Relative energies (ΔE), enthalpies (ΔH), free energies (ΔG), free energies corrected for ΔS_{sym} and ΔS_{mix} (ΔG_{corr}) for fourteen conformers of 2-azidoethanamine in the gas-phase and in solvents (CH_2Cl_2 , DMSO and H_2O) and energy changes ($\Delta\Delta$ values) upon conformational isomerizations, obtained at the MP2/6-311++G(d,p) level. All values are in kcal/mol.

| Conformer | gas/ CH_2Cl_2 /DMSO/ H_2O | | | |
|--|---|--------------------------------|--------------------------------|--------------------------------|
| | ΔE | ΔH | ΔG | ΔG_{corr} |
| <i>aaa</i> , C_s | 1.93/1.19/1.14/1.14 | 1.87/1.16/1.11/1.11 | 1.16/0.69/0.52/0.50 | 1.57/ 1.10/0.93/0.91 |
| <i>aag</i> , C_1 | 1.67/1.41/1.48/1.49 | 1.69/1.39/1.45/1.46 | 1.49/1.24/1.16/1.16 | 1.49/1.24/1.16/1.16 |
| <i>gaa</i> , C_1 | 1.63/ 0.86/0.82/0.82 | 1.71/ 0.93/0.89/0.89 | 1.95/1.26/1.09/1.08 | 1.95/1.26/1.09/1.08 |
| <i>gag</i> , C_1 | 1.49/1.16/1.23/1.23 | 1.61/1.21/1.28/1.29 | 1.75/1.40/1.36/1.36 | 1.75/1.40/1.36/1.36 |
| <i>gag</i> ⁻ , C_1 | 1.53/1.20/1.25/1.26 | 1.62/1.23/1.27/1.28 | 1.75/1.40/1.33/1.32 | 1.75/1.40/1.33/1.32 |
| <i>aga</i> , C_1 | 0.51/0.13/0.16/0.16 | 0.43/0.07/0.10/0.10 | 0.10/0.09/0.11/0.12 | 0.10/0.09/0.11/0.12 |
| <i>agg</i> , C_1 | 0.00/0.10/0.23/0.24 | 0.00/0.04/0.16/0.17 | 0.00/0.00/0.00/0.00 | 0.00/0.00/0.00/0.00 |
| <i>ag</i> ⁻ <i>g</i> , C_1 | - /- /1.44/1.41 | - /- /1.31/1.28 | - /- /0.90/0.83 | - /- /0.90/0.83 |
| <i>gga</i> , C_1 | 0.70/0.10/0.10/0.11 | 0.74/0.16/0.17/0.17 | 1.12/0.73/0.65/0.65 | 1.12/0.73/0.65/0.65 |
| <i>ggg</i> , C_1 | 0.32/0.14/0.19/0.20 | 0.40/0.19/0.23/0.24 | 0.85/0.74/0.68/0.68 | 0.85/0.74/0.68/0.68 |
| <i>ggg</i> ⁻ , C_1 | 1.99/1.04/0.90/0.88 | 2.03/1.09/0.94/0.93 | 2.33/1.10/1.05/1.04 | 2.33/1.10/1.05/1.04 |
| <i>gg</i> ⁻ <i>a</i> , C_1 | 0.99/0.50/0.51/0.51 | 1.00/0.50/0.51/0.51 | 1.42/0.94/0.83/0.82 | 1.42/0.94/0.83/0.82 |
| <i>gg</i> ⁻ <i>g</i> ⁻ , C_1 | 0.52/0.38/0.46/0.47 | 0.57/0.39/0.49/0.50 | 0.80/0.84/0.87/0.88 | 0.80/0.84/0.87/0.88 |
| <i>gg</i> ⁻ <i>g</i> , C_1 | 0.48/ 0.00/0.00/0.00 | 0.47/ 0.00/0.00/0.00 | 1.02/0.65/0.57/0.56 | 1.02/0.65/0.57/0.56 |
| Isomerization | $\Delta\Delta E$ | $\Delta\Delta H$ | $\Delta\Delta G$ | $\Delta\Delta G_{\text{corr}}$ |
| <i>aaa</i> → <i>aga</i> | -1.42/-1.06/-0.99/-0.98 | -1.44/-1.10/-1.01/-1.00 | -1.07/-0.60/-0.40/-0.39 | -1.48/-1.01/-0.81/-0.80 |
| <i>aag</i> → <i>agg</i> | -1.67/-1.31/-1.25/-1.24 | -1.69/-1.35/-1.30/-1.29 | -1.49/-1.24/-1.16/-1.16 | -1.49/-1.24/-1.16/-1.16 |
| <i>aag</i> → <i>ag</i> ⁻ <i>g</i> | - /- /-0.04/-0.08 | - /- /-0.14/-0.18 | - /- /-0.27/-0.33 | - /- /-0.27/-0.33 |
| <i>gaa</i> → <i>gga</i> | -0.93/-0.76/-0.72/-0.71 | -0.96/-0.77/-0.72/-0.71 | -0.83/-0.52/-0.44/-0.43 | -0.83/-0.52/-0.44/-0.43 |
| <i>gaa</i> → <i>gg</i> ⁻ <i>a</i> | -0.64/-0.36/-0.31/-0.31 | -0.70/-0.44/-0.38/-0.38 | -0.52/-0.32/-0.27/-0.26 | -0.52/-0.32/-0.27/-0.26 |
| <i>gag</i> → <i>ggg</i> | -1.17/-1.02/-1.03/-1.04 | -1.21/-1.03/-1.04/-1.05 | -0.89/-0.66/-0.68/-0.68 | -0.89/-0.66/-0.68/-0.68 |
| <i>gag</i> → <i>gg</i> ⁻ <i>g</i> | -1.01/-1.16/-1.23/-1.23 | -1.13/-1.21/-1.28/-1.29 | -0.72/-0.75/-0.80/-0.80 | -0.72/-0.75/-0.80/-0.80 |
| <i>gag</i> ⁻ → <i>ggg</i> ⁻ | 0.46/-0.16/-0.35/-0.37 | 0.42/-0.14/-0.33/-0.35 | 0.58/-0.30/-0.27/-0.28 | 0.58/-0.30/-0.27/-0.28 |
| <i>gag</i> ⁻ → <i>gg</i> ⁻ <i>g</i> ⁻ | -1.01/-0.82/-0.79/-0.78 | -1.04/-0.83/-0.78/-0.77 | -0.95/-0.56/-0.45/-0.44 | -0.95/-0.56/-0.45/-0.44 |
| <i>anti</i> → <i>gauche</i> ^a | -1.49/-0.86/-0.82/-0.82 | -1.61/-0.93/-0.89/-0.89 | -1.16/-0.69/-0.52/-0.50 | -1.49/-1.10/-0.93/-0.91 |

^a Energy difference between the most stable $\text{CC}_{\text{gauche}}$ and the most stable CC_{anti} conformer (bolded numbers for each energy term).

Table S5. Contribution of various energy components to the total binding interactions between $\text{N}_3\text{CH}_2\cdot$ and $\cdot\text{CH}_2\text{NH}_2$ fragments and energy changes ($\Delta\Delta\text{E}$ values) occurring upon conformational isomerization.^a Data for 2-fluoroethanamine (2FEA) are included for comparison.^b Values are in kcal/mol, obtained at the MP2/6-311++G(d,p) level.

| Conformer | $\Delta\text{E}_{\text{tot}}$ | $\Delta\text{E}_{\text{def}}$ | $\Delta\text{E}_{\text{int}}$ | $\Delta\text{E}_{\text{elstat}}$ | $\Delta\text{E}_{\text{oi}}$ | $\Delta\text{E}_{\text{disp}}$ | $\Delta\text{E}_{\text{Pauli}}$ |
|---|-------------------------------|-------------------------------------|-------------------------------------|--|------------------------------------|--------------------------------------|---------------------------------------|
| <i>aaa</i> | -99.45 | 23.92 | -123.37 | -158.94 | -155.77 | -47.67 | 239.01 |
| <i>aag</i> | -99.69 | 29.87 | -129.56 | -153.75 | -153.18 | -49.03 | 226.40 |
| <i>gaa</i> | -99.78 | 15.13 | -114.91 | -162.24 | -156.85 | -47.46 | 251.64 |
| | -99.17 | 15.04 | -114.11 | -155.81 | -164.73 | -47.07 | 253.50 |
| <i>gag</i> | -99.93 | 21.82 | -121.75 | -157.03 | -154.38 | -49.50 | 239.16 |
| <i>gag⁻</i> | -99.89 | 21.91 | -121.80 | -156.98 | -154.52 | -49.70 | 239.40 |
| <i>aga</i> | -100.86 | 23.91 | -124.77 | -160.90 | -156.25 | -47.93 | 240.31 |
| <i>agg</i> | -101.36 | 30.90 | -132.26 | -155.00 | 154.29 | -50.14 | 227.17 |
| <i>gga</i> | -100.72 | 15.51 | -116.23 | -164.30 | -157.49 | -47.95 | 253.51 |
| <i>ggg</i> | -101.11 | 23.84 | -124.95 | -157.96 | -155.12 | -51.24 | 239.37 |
| <i>ggg⁻</i> | -99.41 | 24.02 | -123.43 | -155.86 | -153.49 | -48.59 | 234.51 |
| <i>gg⁻a</i> | -100.38 | 15.36 | -115.74 | -162.98 | -158.73 | -48.78 | 254.75 |
| | -99.81 | 15.57 | -114.95 | -157.05 | -166.12 | -48.33 | 256.55 |
| <i>gg⁻g⁻</i> | -100.87 | 21.08 | -121.95 | -159.28 | -157.59 | -50.41 | 245.33 |
| <i>gg⁻g</i> | -100.88 | 21.45 | -122.33 | -160.09 | -156.78 | -50.72 | 245.26 |
| | -99.74 | 21.46 | -121.35 | -153.94 | -163.32 | -50.71 | 246.62 |
| <i>ag</i> 2FEA | -90.92 | 17.74 | -108.66 | -155.31 | -155.91 | -27.54 | 230.10 |
| <i>gg</i> 2FEA | -92.31 | 19.67 | -111.98 | -156.77 | -157.53 | -28.82 | 231.14 |
| Isomerization | $\Delta\text{E}_{\text{iso}}$ | $\Delta\Delta\text{E}_{\text{def}}$ | $\Delta\Delta\text{E}_{\text{int}}$ | $\Delta\Delta\text{E}_{\text{elstat}}$ | $\Delta\Delta\text{E}_{\text{oi}}$ | $\Delta\Delta\text{E}_{\text{disp}}$ | $\Delta\Delta\text{E}_{\text{Pauli}}$ |
| <i>aaa</i> → <i>aga</i> | -1.42 | -0.02 | -1.40 | -1.96 (72.6) | -0.48 (17.8) | -0.26 (9.6) | 1.30 |
| <i>aag</i> → <i>agg</i> | -1.67 | 1.03 | -2.70 | -1.25 (36.0) | -1.11 (32.0) | -1.11 (32.0) | 0.77 |
| <i>gaa</i> → <i>gga</i> | -0.93 | 0.39 | -1.32 | -2.06 (64.6) | -0.64 (20.1) | -0.49 (15.3) | 1.87 |
| <i>gaa</i> → <i>gg⁻a</i> | -0.64 | 0.19 | -0.83 | -0.74 (18.8) | -1.88 (47.7) | -1.32 (33.5) | 3.11 |
| <i>gag</i> → <i>ggg</i> | -1.17 | 2.03 | -3.20 | -0.93 (27.3) | -0.74 (21.7) | -1.74 (51.0) | 0.21 |
| <i>gag</i> → <i>gg⁻g</i> | -1.01 | -0.43 | -0.58 | -3.06 (45.8) | -2.40 (35.9) | -1.22 (18.3) | 6.10 |
| <i>gag⁻</i> → <i>ggg⁻</i> | 0.46 | 2.09 | -1.63 | 1.12 | 1.03 | 1.11 | -4.89 |
| <i>gag⁻</i> → <i>gg⁻g⁻</i> | -1.01 | -0.86 | -0.15 | -2.30 (37.8) | -3.07 (50.5) | -0.71 (11.7) | 5.93 |
| <i>gag</i> → <i>ggg</i> | -1.17 | 2.03 | -3.20 | -0.93 | -0.74 | -1.74 | 0.21 |
| <i>ggg</i> → <i>agg</i> | -0.32 | 6.99 | -7.31 | 2.96 | 0.83 | 1.10 | -12.20 |
| <i>gag</i> → <i>agg^c</i> | -1.49 | 9.02 | -10.51 | 2.03 | 0.09 | -0.64 | -11.99 |

| | | | | | | | |
|--|--------------|-------------|--------------|--------------|--------------|--------------|--------------|
| <i>gag</i> → <i>aag</i> | 0.18 | 7.99 | -7.81 | 3.28 | 1.20 | 0.47 | -12.76 |
| <i>aag</i> → <i>agg</i> | -1.67 | 1.03 | -2.70 | -1.25 | -1.11 | -1.11 | 0.77 |
| <i>gag</i> → <i>agg</i> ^c | -1.49 | 9.02 | -10.51 | 2.03 | 0.09 | -0.64 | -11.99 |
| <i>gaa</i> → <i>gg⁻a</i> | <i>-0.31</i> | <i>0.53</i> | <i>-0.84</i> | <i>-1.24</i> | <i>-1.39</i> | <i>-1.26</i> | <i>3.05</i> |
| | | | | (31.9) | (35.7) | (32.4) | |
| <i>gg⁻a</i> → <i>gg⁻g</i> | <i>-0.51</i> | <i>5.89</i> | <i>-6.40</i> | <i>3.11</i> | <i>2.80</i> | <i>-2.38</i> | <i>-9.93</i> |
| | | | | | | (19.3) | (80.7) |
| <i>gaa</i> → <i>gg⁻g</i> ^c | <i>-0.82</i> | <i>6.42</i> | <i>-7.24</i> | <i>1.87</i> | <i>1.41</i> | <i>-3.64</i> | <i>-6.88</i> |
| <i>ag</i> 2FEA → <i>gg</i> 2FEA | -1.40 | 1.92 | -3.32 | -1.46 | -1.62 | -1.28 | 1.04 |
| | | | | (33.5) | (37.2) | (29.3) | |

^a Labeling of various energy terms is the same as in Table 2. Values in italic are in H₂O. Values in parentheses are percentage contribution to all attractive interactions. ^bFrom ref. 3f. ^cCorresponds to the most stable CC_{anti} → the most stable CC_{gauche} isomerization.

Table S6. Energies of vicinal hyperconjugative interactions between N₃CH₂ and CH₂NH₂ fragments in 2-azidoethanamine and their change upon conformational isomerization, estimated on the basis of second-order perturbative approach at the HF/6-311++G(d,p) level.^a Energies are in kcal/mol.

| Conformer | total | total _{gauche} | total _{anti} | $\sigma_{\text{CH}} \rightarrow \sigma_{\text{CH}}^*$ | $\sigma_{\text{CN}_3} \rightarrow \sigma_{\text{CNH}_2}^*$ $\sigma_{\text{CNH}_2} \rightarrow \sigma_{\text{CN}_3}^*$ | $\sigma_{\text{CH}} \rightarrow \sigma_{\text{CN}_3}^*$ $\sigma_{\text{CH}} \rightarrow \sigma_{\text{CNH}_2}^*$ | $\sigma_{\text{CN}_3} \rightarrow \sigma_{\text{CH}}^*$ $\sigma_{\text{CNH}_2} \rightarrow \sigma_{\text{CH}}^*$ |
|---|--------|-------------------------|-----------------------|---|--|---|---|
| <i>aaa</i> | -20.63 | -3.34 | -17.29 | -3.63/-3.63/-3.01/-3.01 | -2.26/-1.75 | | |
| <i>aag</i> | -20.66 | -3.65 | -17.01 | -3.32/-3.63/-3.00/-3.00 | -1.90/-2.16 | | |
| <i>gaa</i> | -20.28 | -3.21 | -17.07 | -3.63/-3.32/-2.96/-3.11 | -2.10/-1.95 | | |
| <i>gag</i> | -20.46 | -3.50 | -16.96 | -3.33/-3.37/-2.99/-3.09 | -1.79/-2.39 | | |
| <i>gag⁻</i> | -20.57 | -3.55 | -17.02 | -3.69/-3.03/-2.95/-3.14 | -1.82/-2.39 | | |
| <i>aga</i> | -21.74 | -3.28 | -18.46 | -3.81/-3.02 | | -4.34/-4.76 | -1.27/-1.26 |
| <i>agg</i> | -21.69 | -3.70 | -17.99 | -3.56/-3.10 | | -4.42/-3.98 | -1.34/-1.59 |
| <i>gga</i> | -22.09 | -3.13 | -18.96 | -3.54/-3.18 | | -5.00/-4.73 | -1.25/-1.26 |
| <i>ggg</i> | -22.08 | -3.60 | -18.48 | -3.32/-3.22 | | -5.09/-3.94 | -1.32/-1.59 |
| <i>gg⁻a</i> | -22.27 | -3.14 | -19.13 | -3.84/-3.01 | | -5.10/-4.98 | -1.15/-1.05 |
| <i>gg⁻g⁻</i> | -21.60 | -3.36 | -18.24 | -3.52/-3.05 | | -4.86/-4.07 | -1.30/-1.44 |
| <i>gg⁻g</i> | -21.70 | -3.56 | -18.14 | -3.75/-3.05 | | -4.55/-4.13 | -1.27/-1.39 |
| Isomerization | | | | | | | |
| <i>aaa</i> → <i>aga</i> | -1.11 | 0.06 | -1.17 | | | | |
| <i>aag</i> → <i>agg</i> | -1.03 | -0.05 | -0.98 | | | | |
| <i>gaa</i> → <i>gga</i> | -1.81 | 0.08 | -1.89 | | | | |
| <i>gaa</i> → <i>gg⁻a</i> | -1.99 | 0.07 | -2.06 | | | | |
| <i>gag</i> → <i>ggg</i> | -1.62 | -0.10 | -1.52 | | | | |
| <i>gag</i> → <i>gg⁻g</i> | -1.24 | -0.06 | -1.18 | | | | |
| <i>gag⁻</i> → <i>gg⁻g⁻</i> | -1.03 | 0.19 | -1.22 | | | | |

^a Individual interactions correspond to *anti* vicinal hyperconjugation. Total_{anti} is the sum of six interactions between *anti*-related σ -bonds. Total_{gauche} is the sum of twelve interactions between *gauche*-related σ -bonds. Total is the sum of all vicinal hyperconjugations, that is total_{anti} + total_{gauche}.

Table S7. Relative energies (ΔE), enthalpies (ΔH) and free energies (ΔG) for four conformers of 2-azidoethylammonium cation in the gas-phase and in solvents (CH_2Cl_2 , DMSO and H_2O) and energy changes ($\Delta\Delta$ values) upon conformational isomerizations, obtained at the MP2/6-311++G(d,p) level. All values are in kcal/mol.

| Conformer | gas/ CH_2Cl_2 /DMSO/ H_2O | | |
|--|---|--------------------------------|--------------------------------|
| | ΔE | ΔH | ΔG |
| <i>aa</i> , C_1 | 8.60/3.58/2.97/2.91 | 8.60/3.83/3.21/3.14 | 7.57/3.24/3.11/3.08 |
| <i>ag</i> , C_1 | 9.79/3.80/3.05/2.98 | 9.77/4.19/3.41/3.33 | 9.00/4.46/3.83/3.77 |
| <i>ga</i> , C_1 | 0.00/0.00/0.00/0.00 | 0.00/0.00/0.00/0.00 | 0.00/0.00/0.00/0.00 |
| <i>gg</i> , C_1 | - /0.83/0.59/0.57 | - /0.83/0.66/0.63 | - /1.08/1.31/1.32 |
| Isomerization | $\Delta\Delta E$ | $\Delta\Delta H$ | $\Delta\Delta G$ |
| <i>aa</i> \rightarrow <i>ga</i> ^a | -8.60/-3.58/-2.97/-2.91 | -8.60/-3.38/-3.21/-3.14 | -7.57/-3.24/-3.11/-3.08 |
| <i>ag</i> \rightarrow <i>gg</i> | - /-2.97/-2.46/-2.41 | - /-3.36/-2.75/-2.70 | - /-3.38/-2.52/-2.45 |

^a Energy difference between the most stable $\text{CC}_{\text{gauche}}$ and the most stable CC_{anti} conformer (bolded numbers for each energy term).

Table S8. Contribution of various energy components to the total binding interactions between $\text{N}_3\text{CH}_2\cdot$ and $\cdot\text{CH}_2\text{NH}_3^+$ fragments in the most stable CC_{anti} and the most stable $\text{CC}_{\text{gauche}}$ forms and energy changes ($\Delta\Delta E$ values) occurring upon conformational isomerization.^a Data for 2-fluoroethylammonium cation (2FEAH) are included for comparison.^b Values are in kcal/mol, obtained at the MP2/6-311++G(d,p) level.

| Conformer | ΔE_{tot} | ΔE_{def} | ΔE_{int} | ΔE_{elstat} | ΔE_{oi} | ΔE_{disp} | ΔE_{Pauli} |
|---|-------------------------|-------------------------------|-------------------------------|----------------------------------|------------------------------|--------------------------------|---------------------------------|
| <i>aa</i> | -110.10 | 21.79 | -131.89 | -133.27 | -153.87 | -47.32 | 202.57 |
| | <i>-107.74</i> | <i>20.69</i> | <i>-128.43</i> | <i>-64.82</i> | <i>-223.85</i> | <i>-47.89</i> | <i>208.13</i> |
| <i>ga</i> | -118.66 | 21.05 | -139.71 | -143.77 | -158.52 | -47.05 | 209.63 |
| | <i>-110.65</i> | <i>20.35</i> | <i>-131.00</i> | <i>-75.03</i> | <i>-221.53</i> | <i>-48.20</i> | <i>213.76</i> |
| <i>a</i> FEAH | -99.18 | 11.22 | -110.40 | -131.03 | -151.97 | -29.64 | 202.24 |
| <i>g</i> FEAH | -106.02 | 11.56 | -117.58 | -140.48 | -155.52 | -29.78 | 208.20 |
| Isomerization | ΔE_{iso} | $\Delta\Delta E_{\text{def}}$ | $\Delta\Delta E_{\text{int}}$ | $\Delta\Delta E_{\text{elstat}}$ | $\Delta\Delta E_{\text{oi}}$ | $\Delta\Delta E_{\text{disp}}$ | $\Delta\Delta E_{\text{Pauli}}$ |
| <i>aa</i> \rightarrow <i>ga</i> | -8.57 | -0.75 | -7.82 | -10.50 | -4.65 | 0.27 | 7.06 |
| | <i>-2.91</i> | <i>-0.34</i> | <i>-2.57</i> | <i>-10.21</i> | <i>2.32</i> | <i>-0.31</i> | <i>5.63</i> |
| <i>a</i> 2FEAH \rightarrow <i>g</i> 2FEAH | -6.84 | 0.34 | -7.18 | -9.45 | -3.55 | -0.14 | 5.96 |
| | | | | <i>(71.9)</i> | <i>(27.0)</i> | <i>(1.1)</i> | |

^a Labeling of various energy terms is the same as in Table 2. Values in italic are in H_2O . Values in parentheses are percentage contribution to all attractive interactions. ^bFrom ref. 3f.

Table S9. Energies of vicinal hyperconjugative interactions between N_3CH_2 and $CH_2NH_3^+$ fragments in the most stable CC_{anti} and the most stable CC_{gauche} isomer of 2-azidoethylammonium cation and their changes upon conformational isomerization, estimated on the basis of second-order perturbative approach at the HF/6-311++G(d,p) level.^a Energies are in kcal/mol.

| Conformer | total | total _{gauche} | total _{anti} | $\sigma_{CH} \rightarrow \sigma_{CH}^*$ | $\sigma_{CN_3} \rightarrow \sigma_{CNH_3}^*$ / $\sigma_{CNH_3} \rightarrow \sigma_{CN_3}^*$ | $\sigma_{CH} \rightarrow \sigma_{CN_3}^*$ / $\sigma_{CH} \rightarrow \sigma_{CNH_3}^*$ | $\sigma_{CN_3} \rightarrow \sigma_{CH}^*$ / $\sigma_{CNH_3} \rightarrow \sigma_{CH}^*$ |
|-----------------------|---------------|-------------------------|-----------------------|---|--|---|---|
| <i>aa</i> | -20.47 | -4.02 | -16.45 | -2.83/-2.80/-3.04/-3.05 | -3.55/-1.18 | | |
| | <i>-20.14</i> | <i>-4.05</i> | <i>-16.09</i> | <i>-2.90/-2.91/-2.97/-2.93</i> | <i>-2.84/-1.54</i> | | |
| <i>ga</i> | -20.48 | -3.99 | -16.49 | -2.86/-2.96 | | -2.60/-5.34 | -1.58/-1.15 |
| | <i>-21.68</i> | <i>-3.98</i> | <i>-17.70</i> | <i>-3.07/-3.05</i> | | <i>-3.52/-5.49</i> | <i>-1.37/-1.20</i> |
| Isomerization | | | | | | | |
| <i>aa</i> → <i>ga</i> | -0.01 | 0.03 | -0.04 | | | | |
| | <i>-1.54</i> | <i>0.07</i> | <i>-1.61</i> | | | | |

^a Individual interactions correspond to *anti* vicinal hyperconjugation. Total_{anti} is the sum of six interactions between *anti*-related σ -bonds. Total_{gauche} is the sum of twelve interactions between *gauche*-related σ -bonds. Total is the sum of all vicinal hyperconjugations, that is total_{anti} + total_{gauche}. Values in italic are from H₂O.

Table S10. Relative energies (ΔE), enthalpies (ΔH) and free energies (ΔG) for fourteen conformers of 2-azidoethanol in the gas-phase and in solvents (CH_2Cl_2 , DMSO and H_2O) and energy changes ($\Delta\Delta$ values) upon conformational isomerizations, obtained at the MP2/6-311++G(d,p) level. All values are in kcal/mol.

| Conformer | gas/ CH_2Cl_2 /DMSO/ H_2O | | |
|--|---|--------------------------------|--------------------------------|
| | ΔE | ΔH | ΔG |
| <i>aaa</i> , C_1 | 2.49/2.23/2.24/2.25 | 2.36/2.13/2.19/2.20 | 1.24/1.13/1.20/1.20 |
| <i>aag</i> , C_1 | 2.82/2.13/2.04/2.04 | 2.81/2.21/2.16/2.15 | 2.44/1.78/1.62/1.60 |
| <i>gaa</i> , C_1 | 2.39 /2.03/2.03/2.04 | 2.36/2.01 /2.06/2.06 | 1.97/1.59/1.48/1.47 |
| <i>gag</i> , C_1 | 2.75/1.96/ 1.85/1.84 | 2.81/2.03/ 1.96/1.96 | 2.82/2.01/1.84/1.82 |
| <i>gag</i> ⁻ , C_1 | 2.69/ 1.93 /1.85/1.85 | 2.77/2.08/2.03/2.03 | 2.78/2.13/1.95/1.93 |
| <i>aga</i> , C_1 | - /1.44/1.22/1.20 | - /1.30/1.11/1.09 | - /0.76/0.37/0.35 |
| <i>agg</i> , C_1 | 3.44/1.67/1.32/1.29 | 3.32/1.63/1.32/1.29 | 2.98/1.41/0.88/0.82 |
| <i>ag</i> ⁻ <i>g</i> , C_1 | 0.00/0.00 /0.05/0.07 | 0.00/0.00 /0.09/0.10 | 0.00/0.00/0.00/0.00 |
| <i>gga</i> , C_1 | 2.76/1.45/1.21/1.19 | 2.67/1.38/1.19/1.17 | 2.44/1.17/0.91/0.88 |
| <i>ggg</i> , C_1 | 2.69/1.33/1.08/1.06 | 2.72/1.43/1.22/1.20 | 2.84/1.53/1.26/1.22 |
| <i>ggg</i> ⁻ , C_1 | 0.60/0.32/0.30/0.31 | 0.68/0.41/0.43/0.43 | 1.05/0.83/0.74/0.73 |
| <i>gg</i> ⁻ <i>a</i> , C_1 | 0.70/0.06/ 0.00/0.00 | 0.63/0.01/ 0.00/0.00 | 0.83/0.17/0.08/0.07 |
| <i>gg</i> ⁻ <i>g</i> ⁻ , C_1 | 1.58/0.35/0.12/0.11 | 1.56/0.42/0.23/0.21 | 1.94/0.88/0.60/0.57 |
| <i>gg</i> ⁻ <i>g</i> , C_1 | 1.41/- /- /- | 1.29/- /- /- | 0.96/- /- /- |
| Isomerization | $\Delta\Delta E$ | $\Delta\Delta H$ | $\Delta\Delta G$ |
| <i>aaa</i> → <i>aga</i> | - /-0.79/-1.02/-1.05 | - /-0.83/-1.08/-1.11 | - /-0.37/-0.83/-0.85 |
| <i>aag</i> → <i>agg</i> | 0.62/-0.46/-0.72/-0.75 | 0.51/-0.58/-0.84/-0.87 | 0.54/-0.37/-0.74/-0.78 |
| <i>aag</i> → <i>ag</i> ⁻ <i>g</i> | -2.82/-2.13/-1.99/-1.97 | -2.81/-2.21/-2.07/-2.05 | -2.44/-1.78/-1.62/-1.60 |
| <i>gaa</i> → <i>gga</i> | 0.37/-0.58/-0.82/-0.85 | 0.32/-0.63/-0.87/-0.90 | 0.47/-0.42/-0.56/-0.59 |
| <i>gaa</i> → <i>gg</i> ⁻ <i>a</i> | -1.69/-1.98/-2.03/-2.04 | -1.73/-2.00/-2.06/-2.06 | -1.14/-1.42/-1.40/-1.40 |
| <i>gag</i> → <i>ggg</i> | -0.06/-0.63/-0.77/-0.79 | -0.09/-0.61/-0.74/-0.76 | 0.02/-0.48/-0.58/-0.60 |
| <i>gag</i> → <i>gg</i> ⁻ <i>g</i> | -1.34/- /- /- | -1.52/- /- /- | -1.86/- /- /- |
| <i>gag</i> ⁻ → <i>ggg</i> ⁻ | -2.09/-1.61/-1.55/-1.54 | -2.10/-1.66/-1.60/-1.59 | -1.73/-1.29/-1.21/-1.20 |
| <i>gag</i> ⁻ → <i>gg</i> ⁻ <i>g</i> ⁻ | -1.11/-1.59/-1.73/-1.74 | -1.22/-1.66/-1.80/-1.81 | -0.84/-1.24/-1.34/-1.35 |
| <i>anti</i> → <i>gauche</i> ^a | -2.39/-1.93/-1.85/-1.84 | -2.36/-2.01/-1.96/-1.96 | -1.24/-1.13/-1.20/-1.20 |

^a Energy difference between the most stable $\text{CC}_{\text{gauche}}$ and the most stable CC_{anti} conformer (bolded numbers for each energy term).

Table S11. Contribution of various energy components to the total binding interactions between $\text{N}_3\text{CH}_2\cdot$ and $\cdot\text{CH}_2\text{OH}$ fragments and energy changes ($\Delta\Delta\text{E}$ values) occurring upon conformational isomerization.^a Data for 2-fluoroethanol (2FE) are included for comparison.^b Values are in kcal/mol, obtained at the MP2/6-311++G(d,p) level.

| Conformer | $\Delta\text{E}_{\text{tot}}$ | $\Delta\text{E}_{\text{def}}$ | $\Delta\text{E}_{\text{int}}$ | $\Delta\text{E}_{\text{elstat}}$ | $\Delta\text{E}_{\text{oi}}$ | $\Delta\text{E}_{\text{disp}}$ | $\Delta\text{E}_{\text{Pauli}}$ |
|--|-------------------------------|-------------------------------------|-------------------------------------|--|------------------------------------|--------------------------------------|---------------------------------------|
| <i>aag</i> | -102.68 | 22.06 | -124.74 | -154.60 | -154.83 | -46.05 | 230.74 |
| <i>gaa</i> | -103.13 | 20.91 | -124.04 | -153.63 | -154.67 | -49.63 | 233.89 |
| <i>gag</i> | -102.77 | 14.61 | -117.38 | -157.64 | -156.44 | -47.42 | 244.12 |
| | <i>-102.67</i> | <i>14.21</i> | <i>-116.90</i> | <i>-148.73</i> | <i>-164.13</i> | <i>-47.21</i> | <i>243.17</i> |
| <i>gag</i> ⁻ | -102.83 | 14.43 | -117.26 | -157.96 | -156.42 | -47.09 | 244.21 |
| <i>agg</i> | -102.06 | 21.59 | -123.65 | -154.16 | -156.39 | -45.59 | 232.49 |
| <i>ag</i> ⁻ <i>g</i> | -105.47 | 22.07 | -127.54 | -158.96 | -156.96 | -46.57 | 234.95 |
| <i>gga</i> | -102.73 | 21.39 | -124.12 | -154.35 | -155.94 | -49.46 | 235.63 |
| <i>ggg</i> | -102.84 | 15.92 | -118.76 | -158.62 | -156.52 | -46.94 | 243.32 |
| <i>ggg</i> ⁻ | -104.95 | 15.26 | -120.21 | -162.16 | -158.35 | -48.23 | 248.53 |
| <i>gg</i> ⁻ <i>a</i> | -104.76 | 20.63 | -125.39 | -157.12 | -157.53 | -50.37 | 239.63 |
| | <i>-104.55</i> | <i>20.25</i> | <i>-124.78</i> | <i>-149.74</i> | <i>-164.32</i> | <i>-50.58</i> | <i>239.86</i> |
| <i>gg</i> ⁻ <i>g</i> ⁻ | -103.91 | 14.55 | -118.46 | -160.83 | -158.91 | -48.09 | 249.37 |
| <i>gg</i> ⁻ <i>g</i> | -104.07 | 14.41 | -118.48 | -160.49 | -159.36 | -47.79 | 249.16 |
| <i>ag</i> ⁻ 2FE | -93.76 | 10.91 | -104.67 | -155.52 | -157.32 | -25.64 | 233.81 |
| <i>gg</i> ⁻ 2FE | -96.30 | 11.48 | -107.78 | -160.86 | -160.35 | -26.15 | 239.58 |
| Isomerization | $\Delta\text{E}_{\text{iso}}$ | $\Delta\Delta\text{E}_{\text{def}}$ | $\Delta\Delta\text{E}_{\text{int}}$ | $\Delta\Delta\text{E}_{\text{elstat}}$ | $\Delta\Delta\text{E}_{\text{oi}}$ | $\Delta\Delta\text{E}_{\text{disp}}$ | $\Delta\Delta\text{E}_{\text{Pauli}}$ |
| <i>aag</i> → <i>agg</i> | 0.62 | -0.47 | 1.09 | 0.44 | -1.56 | 0.46 | 1.75 |
| <i>aag</i> → <i>ag</i> ⁻ <i>g</i> | -2.82 | -0.02 | -2.80 | -4.36 | -2.13 | -0.52 | 4.21 |
| | | | | (62.2) | (30.4) | (7.4) | |
| <i>gaa</i> → <i>gga</i> | 0.37 | 0.45 | -0.08 | -0.72 | -1.27 | 0.17 | 1.74 |
| | | | | (36.2) | (63.8) | | |
| <i>gaa</i> → <i>gg</i> ⁻ <i>a</i> | -1.69 | -0.34 | -1.35 | -3.49 | -2.86 | -0.74 | 5.74 |
| | | | | (49.2) | (40.3) | (10.5) | |
| <i>gag</i> → <i>ggg</i> | -0.06 | 1.32 | -1.38 | -0.98 | -0.08 | 0.48 | -0.80 |
| | | | | (52.7) | (4.3) | | (43.0) |
| <i>gag</i> → <i>gg</i> ⁻ <i>g</i> | -1.34 | -0.24 | -1.10 | -2.85 | -2.92 | -0.37 | 5.04 |
| | | | | (46.4) | (47.6) | (6.0) | |
| <i>gag</i> ⁻ → <i>ggg</i> ⁻ | -2.09 | 0.86 | -2.95 | -4.20 | -1.93 | -1.14 | 4.32 |
| | | | | (57.8) | (26.5) | (15.7) | |
| <i>gag</i> ⁻ → <i>gg</i> ⁻ <i>g</i> ⁻ | -1.11 | 0.09 | -1.20 | -2.87 | -2.49 | -1.00 | 5.16 |
| | | | | (45.1) | (39.2) | (15.7) | |
| <i>ag</i> ⁻ 2FE → <i>gg</i> ⁻ 2FE | -2.54 | 0.57 | -3.11 | -5.34 | -3.03 | -0.51 | 5.77 |
| | | | | (60.1) | (34.1) | (5.8) | |
| <i>gaa</i> → <i>gg</i> ⁻ <i>a</i> | -1.69 | -0.34 | -1.35 | -3.49 | -2.86 | -0.74 | 5.74 |
| <i>gg</i> ⁻ <i>a</i> → <i>ag</i> ⁻ <i>g</i> | -0.70 | 1.45 | -2.15 | -1.84 | 0.57 | 3.80 | -4.68 |
| <i>gaa</i> → <i>ag</i> ⁻ <i>g</i> ^c | -2.39 | 1.11 | -3.50 | -5.33 | -2.29 | 3.06 | 1.06 |

| | | | | | | | |
|---|-------|-------|-------|--------|-------|--------|--------|
| <i>gaa</i> → <i>aag</i> | 0.43 | 1.13 | -0.70 | -0.97 | -0.16 | 3.58 | -3.15 |
| <i>aag</i> → <i>ag⁻g</i> | -2.82 | -0.02 | -2.80 | -4.36 | -2.13 | -0.52 | 4.21 |
| <i>gaa</i> → <i>ag⁻g^c</i> | -2.39 | 1.11 | -3.50 | -5.33 | -2.29 | 3.06 | 1.06 |
| <i>gag</i> → <i>gg⁻a^c</i> | -1.84 | 6.04 | -7.88 | -1.01 | -0.19 | -3.37 | -3.31 |
| | | | | (12.8) | (2.4) | (42.8) | (42.0) |

^a Labeling of various energy terms is the same as in Table 2. Values in italic are in H₂O. Values in parentheses are percentage contribution to all attractive interactions. ^bFrom ref. 3f. ^cCorresponds to the most stable CC_{anti} → the most stable CC_{gauche} isomerization.

Table S12. Energies of vicinal hyperconjugative interactions between N₃CH₂ and CH₂OH fragments in 2-azidoethanol and their change upon conformational isomerization, estimated on the basis of second-order perturbative approach at the HF/6-311++G(d,p) level.^a Energies are in kcal/mol.

| Conformer | total | total _{gauche} | total _{anti} | $\sigma_{\text{CH}} \rightarrow \sigma_{\text{CH}}^*$ | $\sigma_{\text{CN}_3} \rightarrow \sigma_{\text{COH}}^*$ / $\sigma_{\text{COH}} \rightarrow \sigma_{\text{CN}_3}^*$ | $\sigma_{\text{CH}} \rightarrow \sigma_{\text{CN}_3}^*$ / $\sigma_{\text{CH}} \rightarrow \sigma_{\text{COH}}^*$ | $\sigma_{\text{CN}_3} \rightarrow \sigma_{\text{CH}}^*$ / $\sigma_{\text{COH}} \rightarrow \sigma_{\text{CH}}^*$ |
|---|--------|-------------------------|-----------------------|---|--|---|---|
| <i>aag</i> | -20.05 | -3.88 | -16.17 | -3.49/-3.25/-2.77/-2.86 | -2.18/-1.62 | | |
| <i>gaa</i> | -20.13 | -4.13 | -16.00 | -3.32/-2.98/-2.79/-2.97 | -1.87/-2.07 | | |
| <i>gag</i> | -19.93 | -3.78 | -16.15 | -3.58/-2.96/-2.72/-2.99 | -2.13/-1.77 | | |
| <i>gag⁻</i> | -19.86 | -3.77 | -16.09 | -3.28/-3.23/-2.83/-2.87 | -2.12/-1.76 | | |
| <i>ag⁻g</i> | -21.62 | -3.85 | -17.77 | -3.52/-2.92 | | -4.11/-4.74 | -1.26/-1.22 |
| <i>gg⁻a</i> | -21.92 | -4.05 | -17.87 | -3.41/-3.01 | | -4.50/-4.41 | -1.21/-1.33 |
| <i>gg⁻g</i> | -21.97 | -3.55 | -18.42 | -3.47/-2.96 | | -4.74/-5.00 | -1.16/-1.09 |
| <i>ggg⁻</i> | -22.15 | -3.79 | -18.36 | -3.28/-3.08 | | -4.82/-4.65 | -1.28/-1.25 |
| <i>gg⁻g⁻</i> | -22.16 | -3.67 | -18.49 | -3.72/-2.89 | | -4.47/-5.12 | -1.20/-1.09 |
| Isomerization | | | | | | | |
| <i>aag</i> → <i>ag⁻g</i> | -1.57 | 0.03 | -1.60 | | | | |
| <i>gaa</i> → <i>gg⁻a</i> | -1.79 | 0.08 | -1.87 | | | | |
| <i>gag</i> → <i>gg⁻g</i> | -2.04 | 0.23 | -2.27 | | | | |
| <i>gag⁻</i> → <i>ggg⁻</i> | -2.29 | -0.02 | -2.27 | | | | |
| <i>gag⁻</i> → <i>gg⁻g⁻</i> | -2.30 | 0.10 | -2.40 | | | | |

^a Individual interactions correspond to *anti* vicinal hyperconjugation. Total_{anti} is the sum of six interactions between *anti*-related σ -bonds. Total_{gauche} is the sum of twelve interactions between *gauche*-related σ -bonds. Total is the sum of all vicinal hyperconjugations, that is total_{anti} + total_{gauche}.

Table S13. Relative energies (ΔE), enthalpies (ΔH) and free energies (ΔG) for conformers of protonated 2-azidoethanol in the gas-phase and in solvents (CH_2Cl_2 , DMSO and H_2O) and energy changes ($\Delta\Delta$ values) upon conformational isomerizations, obtained at the MP2/6-311++G(d,p) level. All values are in kcal/mol.

| Conformer | gas/ CH_2Cl_2 /DMSO/ H_2O | | |
|---|---|---------------------------------|---------------------------------|
| | ΔE | ΔH | ΔG |
| <i>aaa</i> , C_1 | 13.26/5.80/4.80/4.71 | 14.10/6.53/5.23/5.10 | 12.62/6.34/4.66/4.45 |
| <i>aag</i> , C_1 | 12.73/5.48/4.57/4.48 | 13.60/5.95/4.97/4.89 | 12.16/5.31/4.39/4.33 |
| <i>gaa</i> , C_1 | - /5.82/4.70/4.59 | - /6.37/4.97/4.87 | - /5.91/4.30/4.30 |
| <i>gag</i> , C_1 | - /5.56/4.53/4.43 | - /6.01/4.94/4.82 | - /5.46/4.42/4.17 |
| <i>gag</i> ⁻ , C_1 | - /5.49/ 4.43/4.33 | - /6.01/ 4.83/4.71 | - /5.29/ 4.17/4.12 |
| <i>aga</i> , C_1 | 1.27/0.73/0.59/0.57 | 1.40/0.83/0.67/0.64 | 1.16/0.80/0.70/0.67 |
| <i>agg</i> , C_1 | 0.00/0.00/0.00/0.00 | 0.00/0.00/0.00/0.00 | 0.00/0.00/0.00/0.00 |
| <i>ag</i> ⁻ <i>g</i> , C_1 | - /3.15/2.33/2.25 | - /3.54/2.64/2.54 | - /3.11/2.28/2.14 |
| <i>gga</i> , C_1 | - /1.54/1.31/1.28 | - /1.69/1.36/1.31 | - /1.61/1.32/1.24 |
| <i>ggg</i> , C_1 | - /0.99/0.77/0.75 | - /0.95/0.74/0.73 | - /0.76/0.58/0.53 |
| <i>ggg</i> ⁻ , C_1 | - /3.72/2.77/2.68 | - /4.12/2.98/2.83 | - /3.67/2.27/1.61 |
| <i>gg</i> ⁻ <i>g</i> , C_1 | - /3.63/2.56/2.45 | - /3.84/2.71/2.60 | - /3.29/2.42/2.39 |
| Isomerization | | | |
| <i>aaa</i> → <i>aga</i> | -11.99/-5.06/-4.22/-4.14 | -12.70/-5.70/-4.56/-4.46 | -11.46/-5.54/-3.95/-3.78 |
| <i>aag</i> → <i>agg</i> | -12.73/-5.48/-4.57/-4.48 | -13.60/-5.95/-4.97/-4.89 | -12.16/-5.31/-4.39/-4.33 |
| <i>aag</i> → <i>ag</i> ⁻ <i>g</i> | - /-2.33/-2.24/-2.23 | - /-2.41/-2.33/-2.35 | - /-2.20/-2.11/-2.19 |
| <i>gaa</i> → <i>gga</i> | - /-4.28/-3.40/-3.31 | - /-4.67/-3.61/-3.56 | - /-4.30/-2.98/-3.06 |
| <i>gag</i> → <i>ggg</i> | - /-4.57/-3.76/-3.68 | - /-5.06/-4.19/-4.09 | - /-4.70/-3.84/-3.64 |
| <i>gag</i> → <i>gg</i> ⁻ <i>g</i> | - /-1.87/-1.97/-1.98 | - /-2.16/-2.23/-2.21 | - /-2.00/-2.00/-1.78 |
| <i>gag</i> ⁻ → <i>ggg</i> ⁻ | - /-1.77/-1.66/-1.65 | - /-1.89/-1.85/-1.88 | - /-1.62/-1.90/-2.51 |
| <i>anti</i> → <i>gauche</i> ^a | -12.73/-5.48/-4.43/-4.33 | -13.60/-5.95/-4.83/-4.71 | -12.16/-5.29/-4.17/-4.12 |

^a Energy difference between the most stable $\text{CC}_{\text{gauche}}$ and the most stable CC_{anti} conformer (bolded numbers for each energy term).

Table S14. Contribution of various energy components to the total binding interactions between N_3CH_2^+ and $\cdot\text{CH}_2\text{OH}_2^+$ fragments in the most stable CC_{anti} and CC_{gauche} forms of protonated 2-azidoethanol and energy changes ($\Delta\Delta\text{E}$ values) occurring upon conformational isomerization.^a Data for protonated 2-fluoroethanol (2FEH) are included for comparison.^b Values are in kcal/mol, obtained at the MP2/6-311++G(d,p) level.

| Conformer | $\Delta\text{E}_{\text{tot}}$ | $\Delta\text{E}_{\text{def}}$ | $\Delta\text{E}_{\text{int}}$ | $\Delta\text{E}_{\text{elstat}}$ | $\Delta\text{E}_{\text{oi}}$ | $\Delta\text{E}_{\text{disp}}$ | $\Delta\text{E}_{\text{Pauli}}$ |
|---|-------------------------------|-------------------------------------|-------------------------------------|--|------------------------------------|--------------------------------------|---------------------------------------|
| <i>aag</i> | -112.30 | 16.31 | -128.61 | -131.08 | -159.24 | -39.53 | 201.24 |
| <i>agg</i> | -124.96 | 25.57 | -150.71 | -152.11 | -177.53 | -46.89 | 225.82 |
| <i>ag</i> 2FEH | -100.54 | 12.03 | -112.57 | -128.21 | -145.83 | -28.43 | 198.90 |
| <i>gg</i> 2FEH | -108.77 | 12.84 | -121.61 | -140.53 | -160.23 | -29.27 | 208.42 |
| <i>gag</i> ⁻ | <i>-106.32</i> | <i>15.13</i> | <i>-121.45</i> | <i>-61.94</i> | <i>-233.35</i> | <i>-47.54</i> | <i>221.38</i> |
| <i>ggg</i> ⁻ | <i>-107.97</i> | <i>15.72</i> | <i>-123.69</i> | <i>-65.68</i> | <i>-233.82</i> | <i>-48.04</i> | <i>223.85</i> |
| <i>agg</i> | <i>-110.65</i> | <i>20.61</i> | <i>-131.26</i> | <i>-74.47</i> | <i>-226.94</i> | <i>-45.84</i> | <i>215.99</i> |
| Isomerization | $\Delta\text{E}_{\text{iso}}$ | $\Delta\Delta\text{E}_{\text{def}}$ | $\Delta\Delta\text{E}_{\text{int}}$ | $\Delta\Delta\text{E}_{\text{elstat}}$ | $\Delta\Delta\text{E}_{\text{oi}}$ | $\Delta\Delta\text{E}_{\text{disp}}$ | $\Delta\Delta\text{E}_{\text{Pauli}}$ |
| <i>aag</i> → <i>agg</i> ^c | -12.73 | 9.37 | -22.10 | -21.03 (45.1) | -18.29 (39.2) | -7.36 (15.7) | 24.58 |
| <i>ag</i> 2FEH → <i>gg</i> 2FEH | -8.23 | 0.81 | -9.04 | -12.32 (66.4) | -5.40 (29.1) | -0.84 (4.5) | 9.52 |
| <i>gag</i> ⁻ → <i>ggg</i> ⁻ | <i>-1.65</i> | <i>0.59</i> | <i>-2.24</i> | <i>-3.74</i> (79.4) | <i>-0.47</i> (10.0) | <i>-0.50</i> (10.6) | <i>2.47</i> |
| <i>ggg</i> ⁻ → <i>agg</i> | <i>-2.68</i> | <i>4.89</i> | <i>-7.57</i> | <i>-8.79</i> (52.8) | <i>6.88</i> | <i>2.20</i> | <i>-7.86</i> (47.2) |
| <i>gag</i> ⁻ → <i>agg</i> ^c | <i>-4.33</i> | <i>5.48</i> | <i>-9.81</i> | <i>-12.53</i> | <i>6.41</i> | <i>1.70</i> | <i>-5.39</i> |

^a Labeling of various energy terms is the same as in Table 2. Values in italic are in H_2O . Values in parentheses are percentage contribution to all attractive interactions. ^bFrom ref. 3f. ^cCorresponds to the most stable CC_{anti} → the most stable CC_{gauche} isomerization.

Table S15. Energies of vicinal hyperconjugative interactions between N_3CH_2 and CH_2OH_2^+ fragments in protonated 2-azidoethanol and their changes upon conformational isomerization, estimated on the basis of second-order perturbative approach at the HF/6-311++G(d,p) level.^a Energies are in kcal/mol.

| Conformer | total | total _{gauche} | total _{anti} | $\sigma_{\text{CH}} \rightarrow \sigma_{\text{CH}}^*$ | $\sigma_{\text{CN}_3} \rightarrow \sigma_{\text{COH}_2}^*$ / $\sigma_{\text{COH}_2} \rightarrow \sigma_{\text{CN}_3}^*$ | $\sigma_{\text{CH}} \rightarrow \sigma_{\text{CN}_3}^*$ / $\sigma_{\text{CH}} \rightarrow \sigma_{\text{COH}_2}^*$ | $\sigma_{\text{CN}_3} \rightarrow \sigma_{\text{CH}}^*$ / $\sigma_{\text{COH}_2} \rightarrow \sigma_{\text{CH}}^*$ |
|-------------------------|--------|-------------------------|-----------------------|---|--|---|---|
| <i>aaa</i> | -21.52 | -4.22 | -17.30 | -2.68/-2.54/-2.92/-2.88 | -5.32/-0.96 | | |
| <i>aag</i> | -21.17 | -4.56 | -16.61 | -2.43/-2.55/-2.93/-2.80 | -4.82/-1.08 | | |
| <i>aga</i> | -18.47 | -4.69 | -13.78 | -2.52/-2.34 | | -1.81/-4.91 | -1.27/-0.93 |
| <i>agg</i> | -18.95 | -4.95 | -14.00 | -2.40/-2.51 | | -1.85/-4.59 | -1.59/-1.06 |
| Isomerization | | | | | | | |
| <i>aaa</i> → <i>aga</i> | 3.05 | -0.47 | 3.52 | | | | |
| <i>aag</i> → <i>agg</i> | 2.22 | -0.39 | 2.61 | | | | |

^a Individual interactions correspond to *anti* vicinal hyperconjugation. Total_{anti} is the sum of six interactions between *anti*-related σ -bonds. Total_{gauche} is the sum of twelve interactions between *gauche*-related σ -bonds. Total is the sum of all vicinal hyperconjugations, that is total_{anti} + total_{gauche}.

Table S16. Relative energies (ΔE), enthalpies (ΔH) and free energies (ΔG) for nine conformers of *N*-(2-azidoethyl)ethanamide in the gas-phase and in solvents (CH_2Cl_2 , DMSO and H_2O) and energy changes ($\Delta\Delta$ values) upon conformational isomerizations, obtained at the MP2/6-311++G(d,p) level. All values are in kcal/mol.

| Conformer | gas/ CH_2Cl_2 /DMSO/ H_2O | | |
|--|---|--------------------------------|--------------------------------|
| | ΔE | ΔH | ΔG |
| <i>aag</i> , C_1 | 3.07/2.38/2.18/2.17 | 3.00/2.35/2.20/2.22 | 1.34/0.99/1.10/1.08 |
| <i>gag</i> , C_1 | 2.68/1.90/1.75/1.74 | 2.70/1.99/1.85/1.88 | 1.45/1.36/1.28/1.26 |
| <i>gag</i> ⁻ , C_1 | 3.13/2.21/1.97/1.95 | 3.13/2.28/2.06/2.08 | 1.85/1.63/1.52/1.51 |
| <i>agg</i> , C_1 | 0.91/0.97/1.00/1.02 | 0.94/0.97/1.00/1.05 | 0.00/0.28/0.30/0.30 |
| <i>ag</i> ⁻ <i>g</i> , C_1 | 3.81/2.03/1.54/1.50 | 3.71/2.00/1.50/1.49 | 3.09/1.63/1.01/0.93 |
| <i>ggg</i> , C_1 | 1.59/1.17/1.06/1.06 | 1.65/1.23/1.11/1.14 | 0.82/0.73/0.43/0.41 |
| <i>ggg</i> ⁻ , C_1 | 2.21/0.76/0.37/0.34 | 2.16/0.84/0.46/0.46 | 2.26/1.14/0.70/0.65 |
| <i>gg</i> ⁻ <i>g</i> ⁻ , C_1 | 0.00/0.00/0.00/0.01 | 0.00/0.00/0.02/0.06 | 0.11/ 0.00/0.00/0.00 |
| <i>gg</i> ⁻ <i>g</i> , C_1 | 1.70/0.42/0.03/ 0.00 | 1.58/0.37/ 0.00/0.00 | 1.76/0.94/0.53/0.48 |
| Isomerization | | | |
| <i>aag</i> → <i>agg</i> | -2.16/-1.41/-1.18/-1.15 | -2.06/-1.38/-1.19/-1.17 | -1.34/-0.71/-0.80/-0.79 |
| <i>aag</i> → <i>ag</i> ⁻ <i>g</i> | 0.74/-0.35/-0.64/-0.67 | 0.71/-0.35/-0.70/-0.73 | 0.76/0.64/-0.09/-0.15 |
| <i>gag</i> → <i>ggg</i> | -1.09/-0.73/-0.68/-0.68 | -1.05/-0.76/-0.74/-0.73 | -0.62/-0.62/-0.84/-0.85 |
| <i>gag</i> → <i>gg</i> ⁻ <i>g</i> | -0.98/-1.48/-1.71/-1.74 | -1.12/-1.62/-1.85/-1.88 | 0.31/-0.41/-0.75/-0.79 |
| <i>gag</i> ⁻ → <i>ggg</i> ⁻ | -0.92/-1.45/-1.60/-1.62 | -0.97/-1.44/-1.60/-1.62 | 0.41/-0.49/-0.82/-0.86 |
| <i>gag</i> ⁻ → <i>gg</i> ⁻ <i>g</i> ⁻ | -3.13/-2.21/-1.97/-1.94 | -3.13/-2.28/-2.04/-2.02 | -1.74/-1.63/-1.52/-1.51 |
| <i>anti</i> → <i>gauche</i> ^a | -2.68/-1.90/-1.75/-1.74 | -2.70/-1.99/-1.85/-1.88 | -1.34/-0.99/-1.10/-1.08 |

^a Energy difference between the most stable $\text{CC}_{\text{gauche}}$ and the most stable CC_{anti} conformer (bolded numbers for each energy term).

Table S17. Contribution of various energy components to the total binding interactions between N_3CH_2^- and CH_2NHAc fragments and energy changes ($\Delta\Delta\text{E}$ values) occurring upon conformational isomerization.^a Values are in kcal/mol, obtained at the MP2/6-311++G(d,p) level.

| Conformer | $\Delta\text{E}_{\text{tot}}$ | $\Delta\text{E}_{\text{def}}$ | $\Delta\text{E}_{\text{int}}$ | $\Delta\text{E}_{\text{elstat}}$ | $\Delta\text{E}_{\text{oi}}$ | $\Delta\text{E}_{\text{disp}}$ | $\Delta\text{E}_{\text{Pauli}}$ |
|--|-------------------------------|-------------------------------------|-------------------------------------|--|------------------------------------|--------------------------------------|---------------------------------------|
| <i>aag</i> | -102.21 | 24.67 | -126.88 | -153.36 | -153.61 | -48.77 | 228.86 |
| <i>gag</i> | -102.62 | 16.68 | -119.30 | -156.67 | -154.80 | -49.59 | 241.76 |
| | <i>-101.96</i> | <i>15.90</i> | <i>-117.87</i> | <i>-144.14</i> | <i>-167.08</i> | <i>-49.20</i> | <i>242.55</i> |
| <i>gag</i> ⁻ | -102.19 | 16.82 | -119.01 | -156.04 | -154.61 | -49.87 | 241.51 |
| <i>agg</i> | -104.38 | 25.06 | -129.44 | -157.26 | -154.88 | -50.27 | 232.82 |
| <i>ag</i> ⁻ <i>g</i> | -101.46 | 25.92 | -127.38 | -153.58 | -154.14 | -50.89 | 231.23 |
| <i>ggg</i> | -103.74 | 16.76 | -120.50 | -159.88 | -155.92 | -50.27 | 245.57 |
| <i>ggg</i> ⁻ | -103.10 | 16.05 | -119.15 | -158.65 | -155.57 | -50.34 | 245.41 |
| <i>gg</i> ⁻ <i>g</i> ⁻ | -105.25 | 17.22 | -122.47 | -159.25 | -156.61 | -53.08 | 246.47 |
| <i>gg</i> ⁻ <i>g</i> | -103.56 | 17.65 | -121.21 | -158.39 | -156.64 | -53.89 | 247.71 |
| | <i>-103.73</i> | <i>17.49</i> | <i>-121.20</i> | <i>-144.15</i> | <i>-171.63</i> | <i>-53.42</i> | <i>248.00</i> |
| Isomerization | $\Delta\text{E}_{\text{iso}}$ | $\Delta\Delta\text{E}_{\text{def}}$ | $\Delta\Delta\text{E}_{\text{int}}$ | $\Delta\Delta\text{E}_{\text{elstat}}$ | $\Delta\Delta\text{E}_{\text{oi}}$ | $\Delta\Delta\text{E}_{\text{disp}}$ | $\Delta\Delta\text{E}_{\text{Pauli}}$ |
| <i>aag</i> → <i>agg</i> | -2.16 | 0.40 | -2.56 | -3.90 | -1.27 | -1.35 | 3.96 |
| | | | | (59.8) | (19.5) | (20.7) | |
| <i>aag</i> → <i>ag</i> ⁻ <i>g</i> | 0.74 | 1.24 | -0.50 | -0.22 | -0.53 | -2.12 | 2.37 |
| | | | | (7.7) | (18.5) | (73.8) | |
| <i>gag</i> → <i>ggg</i> | -1.09 | 0.11 | -1.20 | -3.21 | -1.12 | -0.68 | 3.81 |
| | | | | (64.1) | (22.4) | (13.5) | |
| <i>gag</i> → <i>gg</i> ⁻ <i>g</i> | -0.98 | 0.93 | -1.91 | -1.72 | -1.84 | -4.30 | 5.95 |
| | | | | (21.9) | (23.4) | (54.7) | |
| | <i>-1.74</i> | <i>1.59</i> | <i>-3.33</i> | <i>-0.01</i> | <i>-4.55</i> | <i>-4.22</i> | <i>5.45</i> |
| | | | | (0.1) | (51.8) | (48.1) | |
| <i>gag</i> ⁻ → <i>ggg</i> ⁻ | -0.92 | -0.78 | -0.14 | -2.61 | -0.96 | -0.47 | 3.90 |
| | | | | (64.6) | (23.8) | (11.6) | |
| <i>gag</i> ⁻ → <i>gg</i> ⁻ <i>g</i> ⁻ | -3.13 | 0.33 | -3.46 | -3.21 | -2.00 | -3.21 | 4.96 |
| | | | | (38.1) | (23.8) | (38.1) | |
| <i>gag</i> → <i>gg</i> ⁻ <i>g</i> | -0.98 | 0.93 | -1.91 | -1.72 | -1.84 | -4.30 | 5.95 |
| <i>gg</i> ⁻ <i>g</i> → <i>gg</i> ⁻ <i>g</i> ⁻ | -1.70 | -0.44 | -1.26 | -0.86 | 0.03 | 0.81 | -1.24 |
| <i>gag</i> → <i>gg</i> ⁻ <i>g</i> ^{-b} | -2.68 | 0.49 | -3.17 | -2.58 | -1.81 | -3.49 | 4.71 |
| <i>gag</i> → <i>gag</i> ⁻ | 0.45 | 0.16 | 0.29 | 0.63 | 0.19 | -0.28 | -0.25 |
| <i>gag</i> ⁻ → <i>gg</i> ⁻ <i>g</i> ⁻ | -3.13 | 0.33 | -3.46 | -3.21 | -2.00 | -3.21 | 4.96 |
| <i>gag</i> → <i>gg</i> ⁻ <i>g</i> ^{-b} | -2.68 | 0.49 | -3.17 | -2.58 | -1.81 | -3.49 | 4.71 |

^a Labeling of various energy terms is the same as in Table 2. Values in italic are in H_2O . Values in parentheses are percentage contribution to all attractive interactions. ^bCorresponds to the most stable CC_{anti} → the most stable $\text{CC}_{\text{gauche}}$ isomerization.

Table S18. Energies of vicinal hyperconjugative interactions between N_3CH_2 and CH_2NHAc fragments in *N*-(2-azidoethyl)ethanamide and their change upon conformational isomerization, estimated on the basis of second-order perturbative approach at the HF/6-311++G(d,p) level.^a Energies are in kcal/mol.

| Conformer | total | total _{gauche} | total _{anti} | $\sigma_{CH} \rightarrow \sigma_{CH}^*$ | $\sigma_{CN_3} \rightarrow \sigma_{CNHAc}^*$ / $\sigma_{CNHAc} \rightarrow \sigma_{CN_3}^*$ | $\sigma_{CH} \rightarrow \sigma_{CN_3}^*$ / $\sigma_{CH} \rightarrow \sigma_{CNHAc}^*$ | $\sigma_{CN_3} \rightarrow \sigma_{CH}^*$ / $\sigma_{CNHAc} \rightarrow \sigma_{CH}^*$ |
|--|--------|-------------------------|-----------------------|---|--|---|---|
| <i>aag</i> | -19.56 | -3.69 | -15.87 | -2.90/-3.28/-3.04/-2.94 | -2.21/-1.50 | | |
| <i>gag</i> | -19.19 | -3.44 | -15.75 | -2.93/-3.01/-3.01/-3.09 | -2.04/-1.67 | | |
| <i>gag</i> ⁻ | -19.22 | -3.52 | -15.70 | -3.34/-2.62/-2.82/-3.23 | -1.95/-1.67 | | |
| <i>agg</i> | -20.65 | -3.51 | -17.14 | -3.09/-3.10 | | -4.01/-4.44 | -1.29/-1.24 |
| <i>ggg</i> | -21.03 | -3.34 | -17.69 | -2.83/-3.32 | | -4.68/-4.63 | -1.23/-1.20 |
| <i>ggg</i> ⁻ | -20.91 | -3.19 | -17.72 | -3.21/-3.15 | | -4.49/-4.50 | -1.21/-1.16 |
| <i>gg</i> ⁻ <i>g</i> ⁻ | -20.66 | -3.27 | -17.39 | -3.09/-2.99 | | -4.50/-4.56 | -1.22/-1.03 |
| <i>gg</i> ⁻ <i>g</i> | -21.13 | -3.45 | -17.68 | -3.54/-2.88 | | -4.44/-4.56 | -1.21/-1.05 |
| Isomerization | | | | | | | |
| <i>aag</i> → <i>agg</i> | -1.09 | 0.18 | -1.27 | | | | |
| <i>gag</i> → <i>ggg</i> | -1.84 | 0.10 | -1.94 | | | | |
| <i>gag</i> → <i>gg</i> ⁻ <i>g</i> | -1.94 | -0.01 | -1.93 | | | | |
| <i>gag</i> ⁻ → <i>ggg</i> ⁻ | -1.69 | 0.33 | -2.02 | | | | |
| <i>gag</i> ⁻ → <i>gg</i> ⁻ <i>g</i> ⁻ | -1.44 | 0.25 | -1.69 | | | | |

^a Individual interactions correspond to *anti* vicinal hyperconjugation. Total_{anti} is the sum of six interactions between *anti*-related σ -bonds. Total_{gauche} is the sum of twelve interactions between *gauche*-related σ -bonds. Total is the sum of all vicinal hyperconjugations, that is total_{anti} + total_{gauche}.

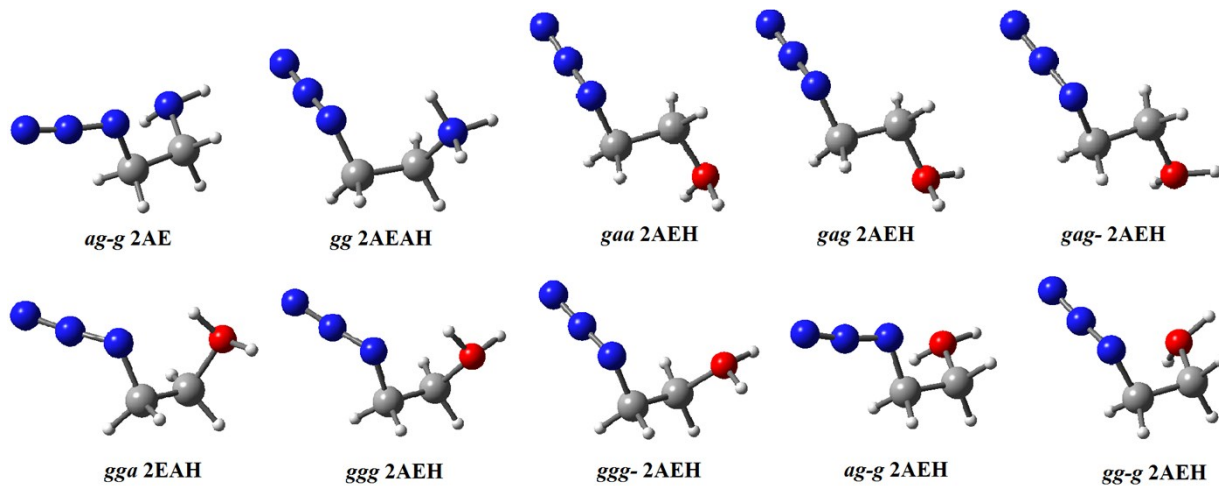


Figure S1. Optimized structures of isomers which are viable only in solvents (2AE: 2-azidoethanamine, in DMSO; 2AEAH: 2-azidoethylammonium ion, in CH_2Cl_2 ; 2AEH: protonated 2-azidoethanol, in CH_2Cl_2).

Absolute energies (a.u.) and x,y,z coordinates (Å) of optimized structures

Gas-phase

1,2-Diazidoethane

aaa, E = -406.1931001 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|---------------|---------------|-------------|-------------------------|-----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | -0.392131 | 0.648500 | 0.089922 |
| 2 | 1 | 0 | -1.053476 | 0.678566 | 0.963125 |
| 3 | 1 | 0 | -0.999367 | 0.718517 | -0.819391 |
| 4 | 6 | 0 | 0.392131 | -0.648500 | 0.089922 |
| 5 | 1 | 0 | 0.999367 | -0.718517 | -0.819391 |
| 6 | 1 | 0 | 1.053476 | -0.678566 | 0.963125 |
| 7 | 7 | 0 | 0.601382 | 1.737049 | 0.150272 |
| 8 | 7 | 0 | 0.146174 | 2.872289 | -0.044045 |
| 9 | 7 | 0 | -0.146174 | 3.977155 | -0.203837 |
| 10 | 7 | 0 | -0.601382 | -1.737049 | 0.150272 |
| 11 | 7 | 0 | -0.146174 | -2.872289 | -0.044045 |
| 12 | 7 | 0 | 0.146174 | -3.977155 | -0.203837 |

aag, E = -406.1931737 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|---------------|---------------|-------------|-------------------------|-----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | -0.396383 | 0.023885 | 0.234218 |
| 2 | 1 | 0 | -0.517906 | 0.065169 | 1.322712 |
| 3 | 1 | 0 | -0.100062 | -0.993522 | -0.051697 |
| 4 | 6 | 0 | 0.666280 | 1.023460 | -0.196519 |
| 5 | 1 | 0 | 0.767906 | 1.015696 | -1.287784 |
| 6 | 1 | 0 | 0.387115 | 2.027237 | 0.122066 |
| 7 | 7 | 0 | -1.643287 | 0.405332 | -0.456815 |
| 8 | 7 | 0 | -2.657208 | -0.188532 | -0.063684 |
| 9 | 7 | 0 | -3.672073 | -0.667537 | 0.205146 |
| 10 | 7 | 0 | 1.953499 | 0.732410 | 0.459428 |
| 11 | 7 | 0 | 2.530046 | -0.286262 | 0.048695 |
| 12 | 7 | 0 | 3.180959 | -1.195218 | -0.240126 |

gag, E = -406.1933327 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|---------------|---------------|-------------|-------------------------|-----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | -0.745854 | 0.164269 | -0.696479 |
| 2 | 1 | 0 | -1.000291 | 0.726072 | -1.595021 |
| 3 | 1 | 0 | -1.006495 | 0.770030 | 0.181082 |
| 4 | 6 | 0 | 0.745854 | -0.164269 | -0.696479 |
| 5 | 1 | 0 | 1.006495 | -0.770030 | 0.181082 |
| 6 | 1 | 0 | 1.000291 | -0.726072 | -1.595021 |
| 7 | 7 | 0 | -1.559430 | -1.064415 | -0.738490 |

| | | | | | |
|----|---|---|-----------|-----------|-----------|
| 8 | 7 | 0 | -1.559430 | -1.722749 | 0.313369 |
| 9 | 7 | 0 | -1.661278 | -2.425294 | 1.224094 |
| 10 | 7 | 0 | 1.559430 | 1.064415 | -0.738490 |
| 11 | 7 | 0 | 1.559430 | 1.722749 | 0.313369 |
| 12 | 7 | 0 | 1.661278 | 2.425294 | 1.224094 |

gag⁻, E = -406.1932421 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|------------------|------------------|----------------|-------------------------|-----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | 0.364319 | -0.615404 | 0.267235 |
| 2 | 1 | 0 | 0.364673 | -0.614970 | 1.358492 |
| 3 | 1 | 0 | 1.402901 | -0.614856 | -0.083019 |
| 4 | 6 | 0 | -0.364319 | 0.615404 | -0.267235 |
| 5 | 1 | 0 | -0.364673 | 0.614970 | -1.358492 |
| 6 | 1 | 0 | -1.402901 | 0.614856 | 0.083019 |
| 7 | 7 | 0 | -0.330916 | -1.854737 | -0.125585 |
| 8 | 7 | 0 | -0.246061 | -2.137365 | -1.330644 |
| 9 | 7 | 0 | -0.242874 | -2.527594 | -2.417214 |
| 10 | 7 | 0 | 0.330916 | 1.854737 | 0.125585 |
| 11 | 7 | 0 | 0.246061 | 2.137365 | 1.330644 |
| 12 | 7 | 0 | 0.242874 | 2.527594 | 2.417214 |

aga, E = -406.1936685 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|------------------|------------------|----------------|-------------------------|-----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | -0.292630 | -0.696986 | 1.117079 |
| 2 | 1 | 0 | -0.039286 | -1.202426 | 2.056564 |
| 3 | 1 | 0 | -1.382869 | -0.632062 | 1.025339 |
| 4 | 6 | 0 | 0.292630 | 0.696986 | 1.117079 |
| 5 | 1 | 0 | 0.039286 | 1.202426 | 2.056564 |
| 6 | 1 | 0 | 1.382869 | 0.632062 | 1.025339 |
| 7 | 7 | 0 | -0.292630 | 1.427276 | -0.022068 |
| 8 | 7 | 0 | 0.383949 | 2.374732 | -0.443643 |
| 9 | 7 | 0 | 0.292630 | -1.427276 | -0.022068 |
| 10 | 7 | 0 | -0.383949 | -2.374732 | -0.443643 |
| 11 | 7 | 0 | 0.914242 | 3.275492 | -0.932057 |
| 12 | 7 | 0 | -0.914242 | -3.275492 | -0.932057 |

agg, E = -406.1932735 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|------------------|------------------|----------------|-------------------------|-----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | -0.906857 | 1.389773 | 0.080560 |
| 2 | 1 | 0 | -1.550880 | 1.767528 | 0.884861 |
| 3 | 1 | 0 | -0.681371 | 2.207731 | -0.603671 |
| 4 | 6 | 0 | 0.378055 | 0.850487 | 0.681890 |
| 5 | 1 | 0 | 0.830843 | 1.622951 | 1.316330 |
| 6 | 1 | 0 | 0.165672 | -0.027350 | 1.306767 |
| 7 | 7 | 0 | 1.284137 | 0.500126 | -0.424592 |
| 8 | 7 | 0 | 2.182869 | -0.301430 | -0.134906 |

| | | | | | |
|----|---|---|-----------|-----------|-----------|
| 9 | 7 | 0 | -1.625843 | 0.389286 | -0.727665 |
| 10 | 7 | 0 | -1.956749 | -0.633710 | -0.112494 |
| 11 | 7 | 0 | 3.064319 | -1.033664 | -0.000669 |
| 12 | 7 | 0 | -2.318940 | -1.636668 | 0.331898 |

agg⁻, E = -406.1958291 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|------------------|------------------|----------------|-------------------------|-----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | 1.033889 | 1.392405 | 0.231114 |
| 2 | 1 | 0 | 1.419543 | 2.364914 | -0.078897 |
| 3 | 1 | 0 | 1.182225 | 1.281201 | 1.311880 |
| 4 | 6 | 0 | -0.446126 | 1.310399 | -0.091526 |
| 5 | 1 | 0 | -0.974266 | 2.153448 | 0.372226 |
| 6 | 1 | 0 | -0.586919 | 1.344468 | -1.177997 |
| 7 | 7 | 0 | -0.937327 | 0.032527 | 0.459318 |
| 8 | 7 | 0 | -2.045148 | -0.332759 | 0.043763 |
| 9 | 7 | 0 | 1.820014 | 0.398373 | -0.514066 |
| 10 | 7 | 0 | 1.752665 | -0.768283 | -0.092924 |
| 11 | 7 | 0 | -3.064509 | -0.780577 | -0.259095 |
| 12 | 7 | 0 | 1.821854 | -1.886546 | 0.182326 |

ggg⁻, E = -406.1937411 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|------------------|------------------|----------------|-------------------------|-----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | -0.716793 | -0.260402 | 1.053264 |
| 2 | 1 | 0 | -0.873040 | -0.877350 | 1.948005 |
| 3 | 1 | 0 | -1.429096 | 0.566374 | 1.081719 |
| 4 | 6 | 0 | 0.716793 | 0.260402 | 1.053264 |
| 5 | 1 | 0 | 0.873040 | 0.877350 | 1.948005 |
| 6 | 1 | 0 | 1.429096 | -0.566374 | 1.081719 |
| 7 | 7 | 0 | 1.052576 | 1.012300 | -0.167066 |
| 8 | 7 | 0 | 0.306309 | 1.971417 | -0.410543 |
| 9 | 7 | 0 | -1.052576 | -1.012300 | -0.167066 |
| 10 | 7 | 0 | -0.306309 | -1.971417 | -0.410543 |
| 11 | 7 | 0 | -0.306309 | 2.886692 | -0.758006 |
| 12 | 7 | 0 | 0.306309 | -2.886692 | -0.758006 |

g⁻gg⁻, E = -406.1960389 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|------------------|------------------|----------------|-------------------------|-----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | 1.149653 | 1.324984 | 0.051007 |
| 2 | 1 | 0 | 1.736177 | 2.101338 | -0.444953 |
| 3 | 1 | 0 | 1.442416 | 1.276711 | 1.106030 |
| 4 | 6 | 0 | -0.332390 | 1.666461 | -0.058035 |
| 5 | 1 | 0 | -0.513318 | 2.638547 | 0.406913 |
| 6 | 1 | 0 | -0.625047 | 1.715673 | -1.112584 |
| 7 | 7 | 0 | -1.161132 | 0.695829 | 0.677947 |
| 8 | 7 | 0 | -1.586385 | -0.258925 | 0.008610 |
| 9 | 7 | 0 | 1.475156 | 0.069764 | -0.644266 |

| | | | | | |
|----|---|---|-----------|-----------|-----------|
| 10 | 7 | 0 | 1.236831 | -0.969994 | -0.007895 |
| 11 | 7 | 0 | -2.059291 | -1.189256 | -0.484297 |
| 12 | 7 | 0 | 1.102849 | -2.016124 | 0.462296 |

ggg, E = -406.1956305 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|------------------|------------------|----------------|-------------------------|-----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | -0.455534 | 1.490525 | -0.389206 |
| 2 | 1 | 0 | -1.240285 | 2.143256 | 0.015518 |
| 3 | 1 | 0 | -0.011787 | 1.965160 | -1.264222 |
| 4 | 6 | 0 | 0.615332 | 1.255164 | 0.669228 |
| 5 | 1 | 0 | 1.016096 | 2.215135 | 1.000432 |
| 6 | 1 | 0 | 0.186403 | 0.744279 | 1.542224 |
| 7 | 7 | 0 | 1.761789 | 0.503439 | 0.139399 |
| 8 | 7 | 0 | 1.563070 | -0.708435 | -0.045316 |
| 9 | 7 | 0 | -1.031338 | 0.224660 | -0.881508 |
| 10 | 7 | 0 | -1.673019 | -0.418487 | -0.037436 |
| 11 | 7 | 0 | 1.545479 | -1.846241 | -0.239186 |
| 12 | 7 | 0 | -2.295868 | -1.118073 | 0.639179 |

2-Azidoethanamine

aaa, E = -298.1418011 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|------------------|------------------|----------------|-------------------------|-----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | -1.499081 | 0.736702 | 0.000000 |
| 2 | 1 | 0 | -1.945313 | 0.266175 | 0.880166 |
| 3 | 1 | 0 | -1.945313 | 0.266175 | -0.880166 |
| 4 | 6 | 0 | 0.000000 | 0.457283 | 0.000000 |
| 5 | 1 | 0 | 0.464681 | 0.899471 | -0.891198 |
| 6 | 1 | 0 | 0.464681 | 0.899471 | 0.891198 |
| 7 | 7 | 0 | 0.189361 | -1.009780 | 0.000000 |
| 8 | 7 | 0 | 1.368633 | -1.384237 | 0.000000 |
| 9 | 7 | 0 | 2.420225 | -1.862078 | 0.000000 |
| 10 | 7 | 0 | -1.847969 | 2.150787 | 0.000000 |
| 11 | 1 | 0 | -1.477998 | 2.620980 | 0.818923 |
| 12 | 1 | 0 | -1.477998 | 2.620980 | -0.818923 |

aag, E = -298.1422118 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|------------------|------------------|----------------|-------------------------|-----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | 1.578301 | 0.496007 | -0.044005 |
| 2 | 1 | 0 | 1.577205 | 1.198243 | 0.800750 |
| 3 | 1 | 0 | 1.558983 | 1.084828 | -0.964353 |
| 4 | 6 | 0 | 0.315297 | -0.344189 | 0.024321 |
| 5 | 1 | 0 | 0.233009 | -0.959696 | -0.877977 |
| 6 | 1 | 0 | 0.351551 | -1.007449 | 0.898417 |
| 7 | 7 | 0 | -0.833263 | 0.579780 | 0.142918 |

| | | | | | |
|----|---|---|-----------|-----------|-----------|
| 8 | 7 | 0 | -1.944619 | 0.053391 | 0.008670 |
| 9 | 7 | 0 | -3.035777 | -0.311357 | -0.093802 |
| 10 | 7 | 0 | 2.733941 | -0.397746 | -0.088510 |
| 11 | 1 | 0 | 3.570913 | 0.111684 | -0.347643 |
| 12 | 1 | 0 | 2.904779 | -0.806991 | 0.823980 |

gaa, E = -298.1422683 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|------------------|------------------|----------------|-------------------------|-----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | 1.194424 | -0.348147 | -0.376710 |
| 2 | 1 | 0 | 1.204244 | -0.181801 | -1.457428 |
| 3 | 1 | 0 | 0.676766 | -1.297294 | -0.202367 |
| 4 | 6 | 0 | 0.405442 | 0.784587 | 0.284666 |
| 5 | 1 | 0 | 0.364038 | 0.634386 | 1.371935 |
| 6 | 1 | 0 | 0.885111 | 1.745535 | 0.090458 |
| 7 | 7 | 0 | -0.959651 | 0.909794 | -0.267824 |
| 8 | 7 | 0 | -1.714670 | -0.038488 | -0.012211 |
| 9 | 7 | 0 | -2.526320 | -0.843743 | 0.156285 |
| 10 | 7 | 0 | 2.567727 | -0.486356 | 0.088501 |
| 11 | 1 | 0 | 3.099839 | 0.358541 | -0.089685 |
| 12 | 1 | 0 | 2.601206 | -0.666454 | 1.086089 |

gag, E = -298.1424994 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|------------------|------------------|----------------|-------------------------|-----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | -1.183509 | -0.368995 | 0.331280 |
| 2 | 1 | 0 | -1.143382 | -0.282628 | 1.426018 |
| 3 | 1 | 0 | -0.696822 | -1.310208 | 0.056244 |
| 4 | 6 | 0 | -0.400772 | 0.789763 | -0.275126 |
| 5 | 1 | 0 | -0.357972 | 0.680079 | -1.364363 |
| 6 | 1 | 0 | -0.885521 | 1.739642 | -0.043109 |
| 7 | 7 | 0 | 0.957468 | 0.897839 | 0.297651 |
| 8 | 7 | 0 | 1.715907 | -0.040325 | 0.017847 |
| 9 | 7 | 0 | 2.528778 | -0.840586 | -0.167200 |
| 10 | 7 | 0 | -2.532877 | -0.373863 | -0.229932 |
| 11 | 1 | 0 | -3.013707 | -1.236966 | -0.002585 |
| 12 | 1 | 0 | -3.081842 | 0.384017 | 0.162301 |

gag⁻, E = -298.1424243 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|------------------|------------------|----------------|-------------------------|-----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | 1.201519 | -0.309609 | -0.390991 |
| 2 | 1 | 0 | 1.265543 | -0.096310 | -1.461068 |
| 3 | 1 | 0 | 0.662452 | -1.262102 | -0.275264 |
| 4 | 6 | 0 | 0.398706 | 0.802797 | 0.272790 |
| 5 | 1 | 0 | 0.357962 | 0.648616 | 1.359325 |
| 6 | 1 | 0 | 0.870173 | 1.765538 | 0.080143 |
| 7 | 7 | 0 | -0.968828 | 0.899500 | -0.277991 |
| 8 | 7 | 0 | -1.710631 | -0.055548 | -0.011796 |

| | | | | | |
|----|---|---|-----------|-----------|-----------|
| 9 | 7 | 0 | -2.511875 | -0.869179 | 0.166019 |
| 10 | 7 | 0 | 2.552145 | -0.319186 | 0.166029 |
| 11 | 1 | 0 | 2.549764 | -0.705315 | 1.104265 |
| 12 | 1 | 0 | 3.167082 | -0.898669 | -0.394029 |

aga, E = -298.1440541 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|------------------|------------------|----------------|-------------------------|-----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | -1.745098 | 0.495856 | -0.198174 |
| 2 | 1 | 0 | -1.801322 | 0.638825 | -1.281333 |
| 3 | 1 | 0 | -2.410465 | 1.232869 | 0.262800 |
| 4 | 6 | 0 | -0.320970 | 0.790767 | 0.255958 |
| 5 | 1 | 0 | -0.037656 | 1.818531 | -0.005748 |
| 6 | 1 | 0 | -0.237240 | 0.664264 | 1.343590 |
| 7 | 7 | 0 | 0.568963 | -0.171263 | -0.432180 |
| 8 | 7 | 0 | 1.751968 | -0.143386 | -0.071187 |
| 9 | 7 | 0 | 2.878454 | -0.212968 | 0.174251 |
| 10 | 7 | 0 | -2.235780 | -0.837493 | 0.114295 |
| 11 | 1 | 0 | -1.610550 | -1.532875 | -0.280624 |
| 12 | 1 | 0 | -2.251588 | -0.985581 | 1.118355 |

agg, E = -298.1448704 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|------------------|------------------|----------------|-------------------------|-----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | 1.746055 | 0.487262 | 0.171759 |
| 2 | 1 | 0 | 1.825320 | 0.645749 | 1.257260 |
| 3 | 1 | 0 | 2.419265 | 1.194462 | -0.322387 |
| 4 | 6 | 0 | 0.329801 | 0.810085 | -0.256076 |
| 5 | 1 | 0 | 0.079976 | 1.849944 | -0.014680 |
| 6 | 1 | 0 | 0.229369 | 0.644492 | -1.334723 |
| 7 | 7 | 0 | -0.570449 | -0.105134 | 0.485687 |
| 8 | 7 | 0 | -1.738922 | -0.135729 | 0.080374 |
| 9 | 7 | 0 | -2.853166 | -0.252784 | -0.199486 |
| 10 | 7 | 0 | 2.086439 | -0.863388 | -0.263724 |
| 11 | 1 | 0 | 3.041435 | -1.090340 | -0.007797 |
| 12 | 1 | 0 | 1.482193 | -1.529147 | 0.208267 |

gga, E = -298.1437475 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|------------------|------------------|----------------|-------------------------|-----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | 1.316782 | -0.042311 | 0.676249 |
| 2 | 1 | 0 | 0.707286 | -0.691260 | 1.315405 |
| 3 | 1 | 0 | 2.077648 | 0.410437 | 1.321052 |
| 4 | 6 | 0 | 0.435868 | 1.073254 | 0.114974 |
| 5 | 1 | 0 | 0.013513 | 1.680797 | 0.926397 |
| 6 | 1 | 0 | 1.014491 | 1.723974 | -0.543289 |
| 7 | 7 | 0 | -0.650764 | 0.535802 | -0.736703 |
| 8 | 7 | 0 | -1.526808 | -0.087607 | -0.121040 |
| 9 | 7 | 0 | -2.412751 | -0.679856 | 0.326056 |

| | | | | | |
|----|---|---|----------|-----------|-----------|
| 10 | 7 | 0 | 1.982548 | -0.873328 | -0.316288 |
| 11 | 1 | 0 | 1.300072 | -1.258782 | -0.961382 |
| 12 | 1 | 0 | 2.625514 | -0.315899 | -0.869690 |

ggg, E = -298.1443563 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|------------------|------------------|----------------|-------------------------|-----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | 1.310068 | -0.031264 | 0.670083 |
| 2 | 1 | 0 | 0.688987 | -0.687503 | 1.301140 |
| 3 | 1 | 0 | 2.069537 | 0.420035 | 1.316871 |
| 4 | 6 | 0 | 0.436238 | 1.081087 | 0.115673 |
| 5 | 1 | 0 | 0.015248 | 1.686297 | 0.927361 |
| 6 | 1 | 0 | 1.022500 | 1.718555 | -0.545911 |
| 7 | 7 | 0 | -0.655799 | 0.541349 | -0.731583 |
| 8 | 7 | 0 | -1.518313 | -0.097432 | -0.113026 |
| 9 | 7 | 0 | -2.391740 | -0.705804 | 0.337542 |
| 10 | 7 | 0 | 1.980554 | -0.716402 | -0.429387 |
| 11 | 1 | 0 | 2.531487 | -1.495718 | -0.085905 |
| 12 | 1 | 0 | 1.291486 | -1.092581 | -1.072913 |

ggg⁻, E = -298.1417039 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|------------------|------------------|----------------|-------------------------|-----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | 1.288352 | -0.052366 | 0.620635 |
| 2 | 1 | 0 | 0.695693 | -0.570123 | 1.382517 |
| 3 | 1 | 0 | 2.197425 | 0.321454 | 1.117094 |
| 4 | 6 | 0 | 0.517976 | 1.164685 | 0.126331 |
| 5 | 1 | 0 | 0.292491 | 1.821384 | 0.976045 |
| 6 | 1 | 0 | 1.115590 | 1.733972 | -0.589104 |
| 7 | 7 | 0 | -0.725746 | 0.833384 | -0.596109 |
| 8 | 7 | 0 | -1.412767 | -0.056343 | -0.081346 |
| 9 | 7 | 0 | -2.141541 | -0.874490 | 0.284325 |
| 10 | 7 | 0 | 1.528245 | -0.989400 | -0.470182 |
| 11 | 1 | 0 | 2.103109 | -0.561957 | -1.189128 |
| 12 | 1 | 0 | 2.020379 | -1.810700 | -0.136036 |

g⁻ga, E = -298.1432959 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|------------------|------------------|----------------|-------------------------|-----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | 1.668685 | -0.108686 | -0.131111 |
| 2 | 1 | 0 | 1.882664 | -0.338759 | -1.178489 |
| 3 | 1 | 0 | 2.579260 | -0.318098 | 0.442047 |
| 4 | 6 | 0 | 0.578649 | -1.060192 | 0.363969 |
| 5 | 1 | 0 | 0.902277 | -2.096758 | 0.245986 |
| 6 | 1 | 0 | 0.367618 | -0.880283 | 1.426541 |
| 7 | 7 | 0 | -0.665143 | -0.939199 | -0.425770 |
| 8 | 7 | 0 | -1.436707 | -0.037460 | -0.073939 |
| 9 | 7 | 0 | -2.263104 | 0.734844 | 0.164831 |
| 10 | 7 | 0 | 1.372570 | 1.311586 | -0.033442 |

| | | | | | |
|----|---|---|----------|----------|-----------|
| 11 | 1 | 0 | 0.626317 | 1.581725 | -0.663130 |
| 12 | 1 | 0 | 1.104545 | 1.577043 | 0.908133 |

g⁻gg, E = -298.1440396 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|------------------|------------------|----------------|-------------------------|-----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | 1.681067 | -0.127767 | -0.094023 |
| 2 | 1 | 0 | 1.974632 | -0.384178 | -1.121217 |
| 3 | 1 | 0 | 2.545670 | -0.299417 | 0.555485 |
| 4 | 6 | 0 | 0.570136 | -1.067977 | 0.348179 |
| 5 | 1 | 0 | 0.868907 | -2.108126 | 0.202806 |
| 6 | 1 | 0 | 0.341538 | -0.901221 | 1.406587 |
| 7 | 7 | 0 | -0.643958 | -0.880973 | -0.475641 |
| 8 | 7 | 0 | -1.443075 | -0.026087 | -0.068145 |
| 9 | 7 | 0 | -2.288786 | 0.713029 | 0.200314 |
| 10 | 7 | 0 | 1.242076 | 1.257128 | 0.067070 |
| 11 | 1 | 0 | 2.035665 | 1.887439 | 0.083227 |
| 12 | 1 | 0 | 0.662574 | 1.538293 | -0.717007 |

g⁻gg⁻, E = -298.1441097 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|------------------|------------------|----------------|-------------------------|-----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | 1.607005 | -0.099465 | -0.228892 |
| 2 | 1 | 0 | 1.631050 | -0.240582 | -1.312631 |
| 3 | 1 | 0 | 2.603919 | -0.347945 | 0.166940 |
| 4 | 6 | 0 | 0.600827 | -1.080849 | 0.355571 |
| 5 | 1 | 0 | 0.948086 | -2.105591 | 0.212412 |
| 6 | 1 | 0 | 0.486043 | -0.906508 | 1.434522 |
| 7 | 7 | 0 | -0.705577 | -1.014881 | -0.317007 |
| 8 | 7 | 0 | -1.407075 | -0.023906 | -0.064522 |
| 9 | 7 | 0 | -2.196765 | 0.804142 | 0.087294 |
| 10 | 7 | 0 | 1.174327 | 1.267370 | 0.047448 |
| 11 | 1 | 0 | 1.371776 | 1.520258 | 1.010257 |
| 12 | 1 | 0 | 1.657772 | 1.933169 | -0.544067 |

2-Azidoethylammonium ion

aa, E = -298.4896945 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|------------------|------------------|----------------|-------------------------|-----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | 1.461809 | 0.531699 | -0.052287 |
| 2 | 1 | 0 | 1.499362 | 1.225841 | 0.787701 |
| 3 | 1 | 0 | 1.474295 | 1.088431 | -0.989291 |
| 4 | 6 | 0 | 0.237243 | -0.365491 | 0.041136 |
| 5 | 1 | 0 | 0.187007 | -1.033839 | -0.830079 |
| 6 | 1 | 0 | 0.280279 | -0.976441 | 0.954638 |
| 7 | 7 | 0 | -0.875805 | 0.579286 | 0.074558 |
| 8 | 7 | 0 | -2.002694 | 0.045682 | 0.002219 |

| | | | | | |
|----|---|---|-----------|-----------|-----------|
| 9 | 7 | 0 | -3.095822 | -0.303905 | -0.052915 |
| 10 | 7 | 0 | 2.724460 | -0.293663 | -0.005821 |
| 11 | 1 | 0 | 2.793411 | -0.823332 | 0.868639 |
| 12 | 1 | 0 | 2.761567 | -0.966994 | -0.777329 |
| 13 | 1 | 0 | 3.558788 | 0.297283 | -0.073664 |

ag, E = -298.4877987 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|------------------|------------------|----------------|-------------------------|-----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | 1.184091 | -0.291489 | -0.428125 |
| 2 | 1 | 0 | 1.283001 | 0.015045 | -1.469905 |
| 3 | 1 | 0 | 0.800775 | -1.312039 | -0.381331 |
| 4 | 6 | 0 | 0.296646 | 0.689036 | 0.337482 |
| 5 | 1 | 0 | 0.175429 | 0.374861 | 1.382912 |
| 6 | 1 | 0 | 0.741210 | 1.688312 | 0.325161 |
| 7 | 7 | 0 | -0.979494 | 0.804424 | -0.361990 |
| 8 | 7 | 0 | -1.830779 | -0.046814 | -0.022849 |
| 9 | 7 | 0 | -2.719293 | -0.744139 | 0.193375 |
| 10 | 7 | 0 | 2.578694 | -0.322911 | 0.159263 |
| 11 | 1 | 0 | 3.014543 | 0.604102 | 0.125301 |
| 12 | 1 | 0 | 2.567668 | -0.621490 | 1.139461 |
| 13 | 1 | 0 | 3.189057 | -0.967988 | -0.352334 |

ga, E = -298.5033931 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|------------------|------------------|----------------|-------------------------|-----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | -1.662546 | 0.601286 | -0.266265 |
| 2 | 1 | 0 | -1.684610 | 0.637392 | -1.355631 |
| 3 | 1 | 0 | -2.410269 | 1.277646 | 0.148445 |
| 4 | 6 | 0 | -0.263232 | 0.880439 | 0.257179 |
| 5 | 1 | 0 | 0.096499 | 1.812030 | -0.191970 |
| 6 | 1 | 0 | -0.263870 | 0.992453 | 1.349087 |
| 7 | 7 | 0 | 0.520843 | -0.292158 | -0.160424 |
| 8 | 7 | 0 | 1.758967 | -0.173709 | -0.045783 |
| 9 | 7 | 0 | 2.904896 | -0.177314 | 0.013338 |
| 10 | 7 | 0 | -2.028278 | -0.808145 | 0.117584 |
| 11 | 1 | 0 | -1.230607 | -1.411712 | -0.138571 |
| 12 | 1 | 0 | -2.174034 | -0.902895 | 1.126721 |
| 13 | 1 | 0 | -2.873438 | -1.135987 | -0.356561 |

2-Azidoethanol

aaa, E = -317.9936287 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|------------------|------------------|----------------|-------------------------|----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | -1.583141 | 0.475521 | -0.084728 |
| 2 | 1 | 0 | -1.534298 | 0.984153 | -1.054246 |
| 3 | 1 | 0 | -1.637358 | 1.231104 | 0.707517 |

| | | | | | |
|----|---|---|-----------|-----------|-----------|
| 4 | 6 | 0 | -0.332424 | -0.355839 | 0.112297 |
| 5 | 1 | 0 | -0.397712 | -0.899388 | 1.060953 |
| 6 | 1 | 0 | -0.234440 | -1.077152 | -0.706466 |
| 7 | 7 | 0 | 0.807909 | 0.582533 | 0.131462 |
| 8 | 7 | 0 | 1.921124 | 0.060009 | -0.002456 |
| 9 | 7 | 0 | 3.012890 | -0.299114 | -0.111987 |
| 10 | 1 | 0 | -3.484966 | 0.080731 | -0.105723 |
| 11 | 8 | 0 | -2.676413 | -0.430192 | -0.023323 |

aag, E = -317.9931043 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|------------------|------------------|----------------|-------------------------|-----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | -1.591839 | 0.489064 | -0.066091 |
| 2 | 1 | 0 | -1.558875 | 1.046658 | -1.002686 |
| 3 | 1 | 0 | -1.642427 | 1.206877 | 0.760766 |
| 4 | 6 | 0 | -0.333193 | -0.352850 | 0.071738 |
| 5 | 1 | 0 | -0.381802 | -0.960313 | 0.985220 |
| 6 | 1 | 0 | -0.244027 | -1.022601 | -0.790800 |
| 7 | 7 | 0 | 0.810086 | 0.578567 | 0.145862 |
| 8 | 7 | 0 | 1.922547 | 0.054860 | 0.005299 |
| 9 | 7 | 0 | 3.013663 | -0.305314 | -0.106790 |
| 10 | 1 | 0 | -2.858274 | -0.746538 | 0.730287 |
| 11 | 8 | 0 | -2.748559 | -0.329770 | -0.128409 |

gaa, E = -317.9937883 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|------------------|------------------|----------------|-------------------------|-----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | -1.217348 | -0.344669 | 0.363449 |
| 2 | 1 | 0 | -1.282010 | -0.169871 | 1.443584 |
| 3 | 1 | 0 | -0.706471 | -1.301653 | 0.192777 |
| 4 | 6 | 0 | -0.419856 | 0.782062 | -0.271693 |
| 5 | 1 | 0 | -0.362122 | 0.634856 | -1.355968 |
| 6 | 1 | 0 | -0.902710 | 1.738060 | -0.072735 |
| 7 | 7 | 0 | 0.928822 | 0.876774 | 0.320873 |
| 8 | 7 | 0 | 1.701003 | -0.043728 | 0.017572 |
| 9 | 7 | 0 | 2.528421 | -0.823434 | -0.187331 |
| 10 | 1 | 0 | -3.053011 | -0.963340 | 0.206036 |
| 11 | 8 | 0 | -2.497271 | -0.328712 | -0.252754 |

gag, E = -317.9932137 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|------------------|------------------|----------------|-------------------------|-----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | -1.219109 | -0.334477 | 0.389783 |
| 2 | 1 | 0 | -1.285520 | -0.128940 | 1.458999 |
| 3 | 1 | 0 | -0.706009 | -1.296206 | 0.256999 |
| 4 | 6 | 0 | -0.423865 | 0.776883 | -0.287973 |
| 5 | 1 | 0 | -0.369048 | 0.604363 | -1.371501 |
| 6 | 1 | 0 | -0.909747 | 1.736830 | -0.115863 |
| 7 | 7 | 0 | 0.931860 | 0.896495 | 0.281896 |

| | | | | | |
|----|---|---|-----------|-----------|-----------|
| 8 | 7 | 0 | 1.698001 | -0.040409 | 0.014394 |
| 9 | 7 | 0 | 2.521602 | -0.830580 | -0.164625 |
| 10 | 1 | 0 | -2.518406 | -0.655385 | -1.015308 |
| 11 | 8 | 0 | -2.551707 | -0.386705 | -0.093231 |

gag⁻, E = -317.993299 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|------------------|------------------|----------------|-------------------------|-----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | -1.211726 | -0.369907 | 0.355741 |
| 2 | 1 | 0 | -1.246155 | -0.220396 | 1.441236 |
| 3 | 1 | 0 | -0.715722 | -1.323131 | 0.158482 |
| 4 | 6 | 0 | -0.424351 | 0.767676 | -0.286831 |
| 5 | 1 | 0 | -0.370011 | 0.616126 | -1.370894 |
| 6 | 1 | 0 | -0.912025 | 1.725529 | -0.095980 |
| 7 | 7 | 0 | 0.923362 | 0.891050 | 0.301911 |
| 8 | 7 | 0 | 1.703020 | -0.030304 | 0.018879 |
| 9 | 7 | 0 | 2.536649 | -0.807292 | -0.169540 |
| 10 | 1 | 0 | -3.004953 | 0.300962 | 0.046828 |
| 11 | 8 | 0 | -2.509487 | -0.482485 | -0.206486 |

agg, E = -317.9921166 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|------------------|------------------|----------------|-------------------------|-----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | -1.756580 | 0.442143 | -0.140913 |
| 2 | 1 | 0 | -1.839055 | 0.643634 | -1.210263 |
| 3 | 1 | 0 | -2.443514 | 1.112470 | 0.393312 |
| 4 | 6 | 0 | -0.343570 | 0.748212 | 0.317465 |
| 5 | 1 | 0 | -0.165874 | 1.829629 | 0.251924 |
| 6 | 1 | 0 | -0.213712 | 0.441374 | 1.364717 |
| 7 | 7 | 0 | 0.601122 | 0.025823 | -0.552682 |
| 8 | 7 | 0 | 1.742228 | -0.110362 | -0.095528 |
| 9 | 7 | 0 | 2.838174 | -0.305520 | 0.211414 |
| 10 | 1 | 0 | -2.048051 | -1.120474 | 0.965227 |
| 11 | 8 | 0 | -2.119945 | -0.914793 | 0.029169 |

agg⁻, E = -317.9975925 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|------------------|------------------|----------------|-------------------------|-----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | 1.769865 | 0.432869 | 0.162376 |
| 2 | 1 | 0 | 1.877186 | 0.565816 | 1.246226 |
| 3 | 1 | 0 | 2.481718 | 1.089393 | -0.342360 |
| 4 | 6 | 0 | 0.361145 | 0.812312 | -0.247646 |
| 5 | 1 | 0 | 0.151734 | 1.857083 | 0.011957 |
| 6 | 1 | 0 | 0.241168 | 0.667594 | -1.327172 |
| 7 | 7 | 0 | -0.549747 | -0.090944 | 0.493424 |
| 8 | 7 | 0 | -1.716056 | -0.120341 | 0.079270 |
| 9 | 7 | 0 | -2.829291 | -0.229829 | -0.204898 |
| 10 | 1 | 0 | 1.421680 | -1.454368 | 0.175797 |
| 11 | 8 | 0 | 2.088263 | -0.888601 | -0.228425 |

gga, E=-317.9931951 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|------------------|------------------|----------------|-------------------------|-----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | 1.287412 | -0.128280 | 0.624199 |
| 2 | 1 | 0 | 0.642741 | -0.831485 | 1.168823 |
| 3 | 1 | 0 | 2.071821 | 0.217366 | 1.311107 |
| 4 | 6 | 0 | 0.474800 | 1.074197 | 0.187887 |
| 5 | 1 | 0 | 0.152677 | 1.636642 | 1.073748 |
| 6 | 1 | 0 | 1.086664 | 1.723372 | -0.438509 |
| 7 | 7 | 0 | -0.694028 | 0.718517 | -0.640479 |
| 8 | 7 | 0 | -1.488658 | -0.066018 | -0.108883 |
| 9 | 7 | 0 | -2.304063 | -0.796174 | 0.262457 |
| 10 | 1 | 0 | 2.145573 | -1.605854 | -0.298796 |
| 11 | 8 | 0 | 1.841812 | -0.726227 | -0.535070 |

ggg, E = -317.9933057 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|------------------|------------------|----------------|-------------------------|-----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | 1.306798 | -0.119325 | 0.623375 |
| 2 | 1 | 0 | 0.701612 | -0.729714 | 1.298868 |
| 3 | 1 | 0 | 2.183525 | 0.233778 | 1.183791 |
| 4 | 6 | 0 | 0.514893 | 1.097828 | 0.167006 |
| 5 | 1 | 0 | 0.231645 | 1.693078 | 1.045643 |
| 6 | 1 | 0 | 1.121324 | 1.728696 | -0.486683 |
| 7 | 7 | 0 | -0.676229 | 0.757907 | -0.632311 |
| 8 | 7 | 0 | -1.451894 | -0.046205 | -0.098718 |
| 9 | 7 | 0 | -2.256076 | -0.785119 | 0.277083 |
| 10 | 1 | 0 | 2.141145 | -0.454159 | -1.094366 |
| 11 | 8 | 0 | 1.672500 | -0.978598 | -0.438990 |

ggg⁻, E = -317.9966316 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|------------------|------------------|----------------|-------------------------|-----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | 1.343019 | -0.068464 | 0.659246 |
| 2 | 1 | 0 | 0.740559 | -0.734737 | 1.293251 |
| 3 | 1 | 0 | 2.136631 | 0.360840 | 1.275624 |
| 4 | 6 | 0 | 0.466104 | 1.045594 | 0.113269 |
| 5 | 1 | 0 | 0.044279 | 1.646081 | 0.928634 |
| 6 | 1 | 0 | 1.048720 | 1.688919 | -0.546040 |
| 7 | 7 | 0 | -0.615200 | 0.492960 | -0.738676 |
| 8 | 7 | 0 | -1.518883 | -0.081719 | -0.112812 |
| 9 | 7 | 0 | -2.430652 | -0.623832 | 0.344383 |
| 10 | 1 | 0 | 1.290027 | -1.043147 | -1.000717 |
| 11 | 8 | 0 | 1.979773 | -0.786574 | -0.379513 |

g⁻ga, E = -317.9964716 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|------------------|------------------|----------------|-------------------------|-----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | 1.603310 | -0.012971 | -0.214404 |
| 2 | 1 | 0 | 1.660519 | -0.128211 | -1.302867 |
| 3 | 1 | 0 | 2.600749 | -0.166688 | 0.218607 |
| 4 | 6 | 0 | 0.654399 | -1.052728 | 0.343741 |
| 5 | 1 | 0 | 1.055431 | -2.052416 | 0.170072 |
| 6 | 1 | 0 | 0.540027 | -0.900639 | 1.423917 |
| 7 | 7 | 0 | -0.653950 | -1.028735 | -0.329130 |
| 8 | 7 | 0 | -1.382357 | -0.060239 | -0.062333 |
| 9 | 7 | 0 | -2.184877 | 0.753885 | 0.094136 |
| 10 | 1 | 0 | 1.545349 | 1.931109 | -0.352833 |
| 11 | 8 | 0 | 1.074994 | 1.257083 | 0.143546 |

g⁻gg, E = -317.9950677 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|------------------|------------------|----------------|-------------------------|-----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | 1.595566 | -0.011512 | -0.236458 |
| 2 | 1 | 0 | 1.639990 | -0.144662 | -1.318606 |
| 3 | 1 | 0 | 2.602397 | -0.156220 | 0.177793 |
| 4 | 6 | 0 | 0.653947 | -1.047360 | 0.356878 |
| 5 | 1 | 0 | 1.056517 | -2.050164 | 0.200122 |
| 6 | 1 | 0 | 0.544426 | -0.887453 | 1.438994 |
| 7 | 7 | 0 | -0.662356 | -1.042904 | -0.298265 |
| 8 | 7 | 0 | -1.383154 | -0.062059 | -0.059654 |
| 9 | 7 | 0 | -2.180507 | 0.760231 | 0.083570 |
| 10 | 1 | 0 | 1.231552 | 1.515392 | 0.907390 |
| 11 | 8 | 0 | 1.126270 | 1.311183 | -0.025972 |

g⁻gg⁻, E = -317.9953487 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|------------------|------------------|----------------|-------------------------|-----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | 1.658495 | -0.039146 | -0.126116 |
| 2 | 1 | 0 | 1.883447 | -0.219364 | -1.183061 |
| 3 | 1 | 0 | 2.576002 | -0.177599 | 0.452882 |
| 4 | 6 | 0 | 0.620170 | -1.043535 | 0.348649 |
| 5 | 1 | 0 | 0.986853 | -2.060629 | 0.194518 |
| 6 | 1 | 0 | 0.418641 | -0.894523 | 1.415552 |
| 7 | 7 | 0 | -0.627624 | -0.940761 | -0.433976 |
| 8 | 7 | 0 | -1.414838 | -0.055787 | -0.066763 |
| 9 | 7 | 0 | -2.256375 | 0.697355 | 0.174863 |
| 10 | 1 | 0 | 0.710548 | 1.568853 | -0.668226 |
| 11 | 8 | 0 | 1.230547 | 1.296712 | 0.091784 |

Protonated 2-azidoethanol

aaa, E = -318.2854237 a.u.

| Center | Atomic | Atomic | Coordinates (Angstroms) | | |
|--------|--------|--------|-------------------------|---|---|
| Number | Number | Type | X | Y | Z |

| Number | Number | Type | X | Y | Z |
|--------|--------|------|-----------|-----------|-----------|
| 1 | 6 | 0 | 1.423838 | 0.526903 | -0.142003 |
| 2 | 1 | 0 | 1.521015 | 1.317156 | 0.599738 |
| 3 | 1 | 0 | 1.436714 | 0.934539 | -1.150041 |
| 4 | 6 | 0 | 0.253341 | -0.396225 | 0.133148 |
| 5 | 1 | 0 | 0.142561 | -1.131046 | -0.674622 |
| 6 | 1 | 0 | 0.388995 | -0.923784 | 1.087349 |
| 7 | 7 | 0 | -0.856293 | 0.552480 | 0.191445 |
| 8 | 7 | 0 | -1.982417 | 0.043305 | 0.005029 |
| 9 | 7 | 0 | -3.073067 | -0.283900 | -0.141905 |
| 10 | 1 | 0 | 2.970879 | -0.529699 | 0.849410 |
| 11 | 1 | 0 | 2.856584 | -0.940345 | -0.682639 |
| 12 | 8 | 0 | 2.750328 | -0.211761 | -0.044756 |

aag, E = -318.2862642 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|---------------|---------------|-------------|-------------------------|-----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | 1.419317 | 0.529149 | -0.101208 |
| 2 | 1 | 0 | 1.508755 | 1.252642 | 0.707841 |
| 3 | 1 | 0 | 1.433467 | 1.002307 | -1.080193 |
| 4 | 6 | 0 | 0.250283 | -0.414779 | 0.085707 |
| 5 | 1 | 0 | 0.135378 | -1.055745 | -0.795060 |
| 6 | 1 | 0 | 0.394743 | -1.043330 | 0.975904 |
| 7 | 7 | 0 | -0.855421 | 0.524594 | 0.266602 |
| 8 | 7 | 0 | -1.982364 | 0.048631 | 0.011161 |
| 9 | 7 | 0 | -3.073177 | -0.253250 | -0.181434 |
| 10 | 1 | 0 | 3.490426 | 0.174012 | -0.371408 |
| 11 | 1 | 0 | 2.864401 | -0.758832 | 0.752431 |
| 12 | 8 | 0 | 2.691495 | -0.312137 | -0.096351 |

aga, E = -318.3045322 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|---------------|---------------|-------------|-------------------------|-----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | -1.766490 | 0.518932 | -0.154884 |
| 2 | 1 | 0 | -1.995110 | 0.635982 | -1.211384 |
| 3 | 1 | 0 | -2.544458 | 0.950194 | 0.471400 |
| 4 | 6 | 0 | -0.348896 | 0.967287 | 0.196600 |
| 5 | 1 | 0 | -0.115800 | 1.893998 | -0.334947 |
| 6 | 1 | 0 | -0.227329 | 1.116073 | 1.275005 |
| 7 | 7 | 0 | 0.454884 | -0.177173 | -0.279497 |
| 8 | 7 | 0 | 1.685024 | -0.134181 | -0.047979 |
| 9 | 7 | 0 | 2.820731 | -0.173520 | 0.090156 |
| 10 | 1 | 0 | -0.776890 | -1.180551 | -0.066402 |
| 11 | 1 | 0 | -2.103070 | -1.240825 | 0.920403 |
| 12 | 8 | 0 | -1.783687 | -0.962259 | 0.044609 |

agg, E = -318.3065567 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|---------------|---------------|-------------|-------------------------|---|---|
| | | | X | Y | Z |

| | | | | | |
|----|---|---|-----------|-----------|-----------|
| 1 | 6 | 0 | 1.776665 | 0.504632 | 0.125923 |
| 2 | 1 | 0 | 2.030318 | 0.575684 | 1.183114 |
| 3 | 1 | 0 | 2.529471 | 0.958480 | -0.513465 |
| 4 | 6 | 0 | 0.356125 | 0.977481 | -0.163702 |
| 5 | 1 | 0 | 0.158984 | 1.909900 | 0.371160 |
| 6 | 1 | 0 | 0.203462 | 1.118477 | -1.238349 |
| 7 | 7 | 0 | -0.453288 | -0.151694 | 0.349103 |
| 8 | 7 | 0 | -1.673780 | -0.130041 | 0.059073 |
| 9 | 7 | 0 | -2.802178 | -0.186789 | -0.124278 |
| 10 | 1 | 0 | 2.350774 | -1.499908 | 0.249493 |
| 11 | 1 | 0 | 0.720590 | -1.144436 | 0.020174 |
| 12 | 8 | 0 | 1.714298 | -0.941401 | -0.229092 |

N-(2-Azidoethyl)ethanamide

aag, E = -450.5017572 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|---------------|---------------|-------------|-------------------------|-----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | 0.140306 | 1.008770 | -0.485202 |
| 2 | 1 | 0 | -0.121590 | 2.069036 | -0.508826 |
| 3 | 1 | 0 | 0.159020 | 0.628685 | -1.509413 |
| 4 | 6 | 0 | -0.902211 | 0.238215 | 0.313639 |
| 5 | 1 | 0 | -0.669848 | -0.830709 | 0.277342 |
| 6 | 1 | 0 | -0.900436 | 0.577021 | 1.356989 |
| 7 | 7 | 0 | -2.212325 | 0.517999 | -0.310881 |
| 8 | 7 | 0 | -3.140974 | -0.202911 | 0.076123 |
| 9 | 7 | 0 | -4.089321 | -0.800226 | 0.353513 |
| 10 | 7 | 0 | 1.460870 | 0.868600 | 0.095166 |
| 11 | 1 | 0 | 1.850498 | 1.622115 | 0.638176 |
| 12 | 6 | 0 | 2.183407 | -0.281792 | -0.074035 |
| 13 | 6 | 0 | 3.561142 | -0.290116 | 0.551668 |
| 14 | 1 | 0 | 3.764021 | 0.592293 | 1.162120 |
| 15 | 1 | 0 | 3.658822 | -1.186818 | 1.165773 |
| 16 | 1 | 0 | 4.302149 | -0.349670 | -0.248544 |
| 17 | 8 | 0 | 1.741719 | -1.232081 | -0.708436 |

gag, E = -450.5023757 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|---------------|---------------|-------------|-------------------------|-----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | 0.097848 | -0.763771 | -0.659378 |
| 2 | 1 | 0 | 0.374848 | -1.615305 | -1.285193 |
| 3 | 1 | 0 | 0.345023 | 0.158120 | -1.194649 |
| 4 | 6 | 0 | 0.874035 | -0.813017 | 0.657019 |
| 5 | 1 | 0 | 0.571788 | 0.024334 | 1.294118 |
| 6 | 1 | 0 | 0.674541 | -1.749896 | 1.178785 |
| 7 | 7 | 0 | 2.330039 | -0.794856 | 0.415925 |
| 8 | 7 | 0 | 2.777854 | 0.290865 | 0.016428 |
| 9 | 7 | 0 | 3.335365 | 1.234627 | -0.347167 |
| 10 | 7 | 0 | -1.333437 | -0.792200 | -0.434644 |

| | | | | | |
|----|---|---|-----------|-----------|-----------|
| 11 | 1 | 0 | -1.844353 | -1.650579 | -0.564253 |
| 12 | 6 | 0 | -1.994451 | 0.331354 | -0.015054 |
| 13 | 6 | 0 | -3.488329 | 0.184594 | 0.172501 |
| 14 | 1 | 0 | -3.842505 | -0.839154 | 0.035064 |
| 15 | 1 | 0 | -3.748043 | 0.526693 | 1.175733 |
| 16 | 1 | 0 | -3.991215 | 0.837135 | -0.544483 |
| 17 | 8 | 0 | -1.405431 | 1.388080 | 0.177569 |

gag⁻, E = -450.5016516 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|------------------|------------------|----------------|-------------------------|-----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | -0.168400 | -0.359972 | -0.512458 |
| 2 | 1 | 0 | -0.078189 | 0.265187 | -1.404149 |
| 3 | 1 | 0 | -0.763451 | -1.242890 | -0.763803 |
| 4 | 6 | 0 | -0.851390 | 0.446977 | 0.592306 |
| 5 | 1 | 0 | -0.919973 | -0.149891 | 1.510596 |
| 6 | 1 | 0 | -0.276196 | 1.349148 | 0.794124 |
| 7 | 7 | 0 | -2.190947 | 0.904543 | 0.172162 |
| 8 | 7 | 0 | -3.028402 | 0.002720 | 0.031107 |
| 9 | 7 | 0 | -3.907160 | -0.730764 | -0.129659 |
| 10 | 7 | 0 | 1.151594 | -0.802553 | -0.110422 |
| 11 | 1 | 0 | 1.283998 | -1.744955 | 0.220087 |
| 12 | 6 | 0 | 2.207043 | 0.070687 | -0.092743 |
| 13 | 6 | 0 | 3.532469 | -0.511063 | 0.347916 |
| 14 | 1 | 0 | 3.459763 | -1.547256 | 0.684695 |
| 15 | 1 | 0 | 4.228518 | -0.455631 | -0.491813 |
| 16 | 1 | 0 | 3.931780 | 0.105728 | 1.154850 |
| 17 | 8 | 0 | 2.079977 | 1.240395 | -0.432128 |

agg⁻, E = -450.5051956 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|------------------|------------------|----------------|-------------------------|-----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | -0.246738 | 1.478844 | -0.430530 |
| 2 | 1 | 0 | 0.080698 | 1.990471 | -1.338754 |
| 3 | 1 | 0 | -0.808342 | 2.180806 | 0.189522 |
| 4 | 6 | 0 | 0.958689 | 0.985444 | 0.353117 |
| 5 | 1 | 0 | 1.615494 | 1.827040 | 0.605331 |
| 6 | 1 | 0 | 0.622799 | 0.497633 | 1.274360 |
| 7 | 7 | 0 | 1.669543 | 0.019907 | -0.516085 |
| 8 | 7 | 0 | 2.658949 | -0.517797 | -0.001603 |
| 9 | 7 | 0 | 3.596120 | -1.086593 | 0.361102 |
| 10 | 7 | 0 | -1.133166 | 0.396631 | -0.805701 |
| 11 | 1 | 0 | -0.869836 | -0.161695 | -1.604094 |
| 12 | 6 | 0 | -1.934074 | -0.187192 | 0.142748 |
| 13 | 6 | 0 | -2.636717 | -1.454713 | -0.290814 |
| 14 | 1 | 0 | -2.593439 | -1.618168 | -1.369435 |
| 15 | 1 | 0 | -2.170007 | -2.301585 | 0.219014 |
| 16 | 1 | 0 | -3.678098 | -1.402320 | 0.029477 |
| 17 | 8 | 0 | -2.073294 | 0.296060 | 1.260434 |

agg⁻, E = -450.5005642 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|---------------|---------------|-------------|-------------------------|-----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | 0.257582 | 1.609736 | 0.074635 |
| 2 | 1 | 0 | 0.425893 | 1.541018 | 1.150717 |
| 3 | 1 | 0 | 0.415747 | 2.646829 | -0.239882 |
| 4 | 6 | 0 | -1.172003 | 1.207394 | -0.254245 |
| 5 | 1 | 0 | -1.870998 | 1.853593 | 0.291786 |
| 6 | 1 | 0 | -1.363115 | 1.317936 | -1.330718 |
| 7 | 7 | 0 | -1.342854 | -0.203569 | 0.141757 |
| 8 | 7 | 0 | -2.499199 | -0.633490 | 0.045286 |
| 9 | 7 | 0 | -3.529265 | -1.154127 | -0.000197 |
| 10 | 7 | 0 | 1.224254 | 0.737651 | -0.555168 |
| 11 | 1 | 0 | 1.152666 | 0.600316 | -1.553063 |
| 12 | 6 | 0 | 1.865828 | -0.247851 | 0.164852 |
| 13 | 6 | 0 | 2.573053 | -1.282702 | -0.683298 |
| 14 | 1 | 0 | 2.864177 | -0.895710 | -1.662638 |
| 15 | 1 | 0 | 3.456071 | -1.633482 | -0.149535 |
| 16 | 1 | 0 | 1.896710 | -2.130574 | -0.825602 |
| 17 | 8 | 0 | 1.863193 | -0.280581 | 1.385689 |

ggg, E = -450.504104 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|---------------|---------------|-------------|-------------------------|-----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | -0.139059 | 0.778928 | 0.876358 |
| 2 | 1 | 0 | -0.842819 | 0.502037 | 1.667355 |
| 3 | 1 | 0 | 0.402026 | 1.673475 | 1.194684 |
| 4 | 6 | 0 | -0.884672 | 1.090011 | -0.417766 |
| 5 | 1 | 0 | -1.561278 | 1.941335 | -0.272137 |
| 6 | 1 | 0 | -0.173163 | 1.333652 | -1.205552 |
| 7 | 7 | 0 | -1.637758 | -0.088301 | -0.905404 |
| 8 | 7 | 0 | -2.617737 | -0.399821 | -0.214793 |
| 9 | 7 | 0 | -3.556352 | -0.794688 | 0.332654 |
| 10 | 7 | 0 | 0.819125 | -0.296030 | 0.718613 |
| 11 | 1 | 0 | 0.479643 | -1.245219 | 0.758046 |
| 12 | 6 | 0 | 1.995314 | -0.064320 | 0.050331 |
| 13 | 6 | 0 | 2.822293 | -1.293016 | -0.255944 |
| 14 | 1 | 0 | 2.505284 | -2.171270 | 0.310046 |
| 15 | 1 | 0 | 2.741100 | -1.507978 | -1.324717 |
| 16 | 1 | 0 | 3.867376 | -1.073054 | -0.034843 |
| 17 | 8 | 0 | 2.345954 | 1.066161 | -0.266031 |

ggg⁻, E = -450.5031219 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|---------------|---------------|-------------|-------------------------|----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | 0.137588 | 1.423380 | -0.759689 |
| 2 | 1 | 0 | 0.369162 | 0.711650 | -1.555466 |
| 3 | 1 | 0 | 0.041636 | 2.418368 | -1.207155 |
| 4 | 6 | 0 | 1.264174 | 1.445714 | 0.273716 |
| 5 | 1 | 0 | 2.203424 | 1.744564 | -0.210877 |

| | | | | | |
|----|---|---|-----------|-----------|-----------|
| 6 | 1 | 0 | 1.042004 | 2.167171 | 1.062750 |
| 7 | 7 | 0 | 1.417898 | 0.155158 | 0.967441 |
| 8 | 7 | 0 | 1.864377 | -0.760363 | 0.257959 |
| 9 | 7 | 0 | 2.281476 | -1.693330 | -0.277479 |
| 10 | 7 | 0 | -1.129073 | 1.019601 | -0.189775 |
| 11 | 1 | 0 | -1.558951 | 1.628668 | 0.490725 |
| 12 | 6 | 0 | -1.506987 | -0.303479 | -0.185239 |
| 13 | 6 | 0 | -2.700268 | -0.621374 | 0.688183 |
| 14 | 1 | 0 | -3.340574 | 0.246867 | 0.859908 |
| 15 | 1 | 0 | -3.277632 | -1.417253 | 0.217837 |
| 16 | 1 | 0 | -2.333741 | -0.986835 | 1.651782 |
| 17 | 8 | 0 | -0.919389 | -1.153263 | -0.839794 |

 g^-gg , E = -450.5066436 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|------------------|------------------|----------------|-------------------------|-----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | 0.356563 | -1.597626 | 0.571731 |
| 2 | 1 | 0 | 0.840004 | -1.879913 | 1.509542 |
| 3 | 1 | 0 | -0.160587 | -2.470533 | 0.161637 |
| 4 | 6 | 0 | 1.410910 | -1.135137 | -0.432497 |
| 5 | 1 | 0 | 2.163308 | -1.913603 | -0.567864 |
| 6 | 1 | 0 | 0.940720 | -0.918904 | -1.396114 |
| 7 | 7 | 0 | 2.141776 | 0.049684 | 0.065690 |
| 8 | 7 | 0 | 1.553171 | 1.130473 | -0.071840 |
| 9 | 7 | 0 | 1.141911 | 2.207702 | -0.160757 |
| 10 | 7 | 0 | -0.616299 | -0.563844 | 0.865057 |
| 11 | 1 | 0 | -0.497846 | -0.002583 | 1.694461 |
| 12 | 6 | 0 | -1.510956 | -0.151130 | -0.088468 |
| 13 | 6 | 0 | -2.325833 | 1.067160 | 0.279939 |
| 14 | 1 | 0 | -2.499031 | 1.141254 | 1.355983 |
| 15 | 1 | 0 | -1.784170 | 1.959748 | -0.048327 |
| 16 | 1 | 0 | -3.279269 | 1.025442 | -0.245889 |
| 17 | 8 | 0 | -1.606393 | -0.726077 | -1.166838 |

 g^-gg^- , E = -450.5039351 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|------------------|------------------|----------------|-------------------------|-----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | -0.651730 | -1.607246 | 0.075627 |
| 2 | 1 | 0 | -0.473211 | -1.730332 | -0.994304 |
| 3 | 1 | 0 | -0.754712 | -2.597583 | 0.533942 |
| 4 | 6 | 0 | -1.940683 | -0.818009 | 0.289103 |
| 5 | 1 | 0 | -2.789955 | -1.386423 | -0.094195 |
| 6 | 1 | 0 | -2.104195 | -0.632046 | 1.359506 |
| 7 | 7 | 0 | -1.952238 | 0.451790 | -0.453919 |
| 8 | 7 | 0 | -1.165480 | 1.323532 | -0.060823 |
| 9 | 7 | 0 | -0.521348 | 2.248243 | 0.198662 |
| 10 | 7 | 0 | 0.502531 | -0.923656 | 0.616931 |
| 11 | 1 | 0 | 0.615555 | -0.866676 | 1.617816 |
| 12 | 6 | 0 | 1.439989 | -0.311029 | -0.183881 |
| 13 | 6 | 0 | 2.506582 | 0.451975 | 0.567683 |
| 14 | 1 | 0 | 2.678495 | 0.060267 | 1.573101 |

| | | | | | |
|----|---|---|----------|-----------|-----------|
| 15 | 1 | 0 | 3.433187 | 0.418023 | -0.005042 |
| 16 | 1 | 0 | 2.184682 | 1.494734 | 0.645697 |
| 17 | 8 | 0 | 1.380118 | -0.344184 | -1.404208 |



1,2-Diazidoethane

aaa, E = -406.1988205 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|---------------|---------------|-------------|-------------------------|-----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | -0.395994 | 0.646080 | 0.111031 |
| 2 | 1 | 0 | -1.057577 | 0.679248 | 0.982827 |
| 3 | 1 | 0 | -0.995939 | 0.721836 | -0.801326 |
| 4 | 6 | 0 | 0.395994 | -0.646080 | 0.111031 |
| 5 | 1 | 0 | 0.995939 | -0.721836 | -0.801326 |
| 6 | 1 | 0 | 1.057577 | -0.679248 | 0.982827 |
| 7 | 7 | 0 | 0.593820 | 1.742538 | 0.179267 |
| 8 | 7 | 0 | 0.145301 | 2.870464 | -0.053443 |
| 9 | 7 | 0 | -0.145301 | 3.970406 | -0.246921 |
| 10 | 7 | 0 | -0.593820 | -1.742538 | 0.179267 |
| 11 | 7 | 0 | -0.145301 | -2.870464 | -0.053443 |
| 12 | 7 | 0 | 0.145301 | -3.970406 | -0.246921 |

aag, E = -406.1991311 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|---------------|---------------|-------------|-------------------------|-----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | -0.398356 | 0.007714 | 0.228785 |
| 2 | 1 | 0 | -0.533379 | 0.047227 | 1.314644 |
| 3 | 1 | 0 | -0.103060 | -1.007436 | -0.060907 |
| 4 | 6 | 0 | 0.659198 | 1.014725 | -0.195897 |
| 5 | 1 | 0 | 0.774638 | 1.009068 | -1.284871 |
| 6 | 1 | 0 | 0.376706 | 2.016129 | 0.126406 |
| 7 | 7 | 0 | -1.646427 | 0.386318 | -0.470415 |
| 8 | 7 | 0 | -2.664951 | -0.185860 | -0.065668 |
| 9 | 7 | 0 | -3.683893 | -0.648913 | 0.215533 |
| 10 | 7 | 0 | 1.946607 | 0.725869 | 0.468501 |
| 11 | 7 | 0 | 2.542170 | -0.276977 | 0.052535 |
| 12 | 7 | 0 | 3.209357 | -1.171811 | -0.242286 |

gag, E = -406.1995517 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|---------------|---------------|-------------|-------------------------|-----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | -0.750319 | 0.141506 | -0.704163 |
| 2 | 1 | 0 | -1.026265 | 0.688438 | -1.605080 |
| 3 | 1 | 0 | -1.034882 | 0.734882 | 0.172493 |
| 4 | 6 | 0 | 0.750319 | -0.141506 | -0.704163 |

| | | | | | |
|----|---|---|-----------|-----------|-----------|
| 5 | 1 | 0 | 1.034882 | -0.734882 | 0.172493 |
| 6 | 1 | 0 | 1.026265 | -0.688438 | -1.605080 |
| 7 | 7 | 0 | -1.520914 | -1.119238 | -0.741309 |
| 8 | 7 | 0 | -1.520914 | -1.764699 | 0.315806 |
| 9 | 7 | 0 | -1.617759 | -2.458214 | 1.233727 |
| 10 | 7 | 0 | 1.520914 | 1.119238 | -0.741309 |
| 11 | 7 | 0 | 1.520914 | 1.764699 | 0.315806 |
| 12 | 7 | 0 | 1.617759 | 2.458214 | 1.233727 |

gag-, E = -406.1994448 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|------------------|------------------|----------------|-------------------------|-----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | 0.365666 | -0.614941 | 0.265941 |
| 2 | 1 | 0 | 0.365881 | -0.619839 | 1.356584 |
| 3 | 1 | 0 | 1.401559 | -0.621581 | -0.088814 |
| 4 | 6 | 0 | -0.365666 | 0.614941 | -0.265941 |
| 5 | 1 | 0 | -0.365881 | 0.619839 | -1.356584 |
| 6 | 1 | 0 | -1.401559 | 0.621581 | 0.088814 |
| 7 | 7 | 0 | -0.335251 | -1.853474 | -0.133124 |
| 8 | 7 | 0 | -0.247816 | -2.142023 | -1.334330 |
| 9 | 7 | 0 | -0.239151 | -2.536471 | -2.419288 |
| 10 | 7 | 0 | 0.335251 | 1.853474 | 0.133124 |
| 11 | 7 | 0 | 0.247816 | 2.142023 | 1.334330 |
| 12 | 7 | 0 | 0.239151 | 2.536471 | 2.419288 |

aga, E = -406.2006827 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|------------------|------------------|----------------|-------------------------|-----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | -0.288768 | -0.697219 | 1.035275 |
| 2 | 1 | 0 | -0.003550 | -1.207899 | 1.961217 |
| 3 | 1 | 0 | -1.380992 | -0.648297 | 0.970503 |
| 4 | 6 | 0 | 0.288768 | 0.697219 | 1.035275 |
| 5 | 1 | 0 | 0.003550 | 1.207899 | 1.961217 |
| 6 | 1 | 0 | 1.380992 | 0.648297 | 0.970503 |
| 7 | 7 | 0 | -0.268174 | 1.416312 | -0.131240 |
| 8 | 7 | 0 | 0.288768 | 2.484392 | -0.406323 |
| 9 | 7 | 0 | 0.268174 | -1.416312 | -0.131240 |
| 10 | 7 | 0 | -0.288768 | -2.484392 | -0.406323 |
| 11 | 7 | 0 | 0.721701 | 3.491369 | -0.768633 |
| 12 | 7 | 0 | -0.721701 | -3.491369 | -0.768633 |

agg, E = -406.2007007 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|------------------|------------------|----------------|-------------------------|----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | -0.891090 | 1.389787 | 0.082519 |
| 2 | 1 | 0 | -1.535022 | 1.760104 | 0.887900 |
| 3 | 1 | 0 | -0.671297 | 2.209880 | -0.600402 |
| 4 | 6 | 0 | 0.391879 | 0.845860 | 0.679362 |
| 5 | 1 | 0 | 0.860698 | 1.623332 | 1.292855 |

| | | | | | |
|----|---|---|-----------|-----------|-----------|
| 6 | 1 | 0 | 0.182623 | -0.021970 | 1.316310 |
| 7 | 7 | 0 | 1.287338 | 0.467156 | -0.433910 |
| 8 | 7 | 0 | 2.199598 | -0.311519 | -0.135613 |
| 9 | 7 | 0 | -1.611540 | 0.385632 | -0.729759 |
| 10 | 7 | 0 | -1.985166 | -0.619345 | -0.113200 |
| 11 | 7 | 0 | 3.091741 | -1.028895 | 0.010973 |
| 12 | 7 | 0 | -2.387933 | -1.605204 | 0.334660 |

agg⁻, E = -406.202335 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|------------------|------------------|----------------|-------------------------|-----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | 1.017453 | 1.396852 | 0.247848 |
| 2 | 1 | 0 | 1.389522 | 2.377229 | -0.050345 |
| 3 | 1 | 0 | 1.168702 | 1.271595 | 1.325378 |
| 4 | 6 | 0 | -0.456384 | 1.296915 | -0.088712 |
| 5 | 1 | 0 | -1.001604 | 2.107587 | 0.408089 |
| 6 | 1 | 0 | -0.599100 | 1.368748 | -1.171951 |
| 7 | 7 | 0 | -0.928756 | -0.015622 | 0.405874 |
| 8 | 7 | 0 | -2.061732 | -0.344712 | 0.039294 |
| 9 | 7 | 0 | 1.824653 | 0.416906 | -0.505976 |
| 10 | 7 | 0 | 1.781861 | -0.750872 | -0.096160 |
| 11 | 7 | 0 | -3.102846 | -0.763517 | -0.230603 |
| 12 | 7 | 0 | 1.869116 | -1.869006 | 0.178144 |

ggg, E = -406.2009138 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|------------------|------------------|----------------|-------------------------|-----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | -0.711404 | -0.272072 | 1.039564 |
| 2 | 1 | 0 | -0.856037 | -0.894550 | 1.930101 |
| 3 | 1 | 0 | -1.440013 | 0.539315 | 1.064643 |
| 4 | 6 | 0 | 0.711404 | 0.272072 | 1.039564 |
| 5 | 1 | 0 | 0.856037 | 0.894550 | 1.930101 |
| 6 | 1 | 0 | 1.440013 | -0.539315 | 1.064643 |
| 7 | 7 | 0 | 1.028083 | 1.035689 | -0.185256 |
| 8 | 7 | 0 | 0.299543 | 2.011021 | -0.404336 |
| 9 | 7 | 0 | -1.028083 | -1.035689 | -0.185256 |
| 10 | 7 | 0 | -0.299543 | -2.011021 | -0.404336 |
| 11 | 7 | 0 | -0.299543 | 2.943581 | -0.729284 |
| 12 | 7 | 0 | 0.299543 | -2.943581 | -0.729284 |

g⁻gg⁻, E = -406.2024919 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|------------------|------------------|----------------|-------------------------|----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | 1.337587 | 1.181686 | 0.052534 |
| 2 | 1 | 0 | 1.996901 | 1.884744 | -0.458288 |
| 3 | 1 | 0 | 1.630185 | 1.116051 | 1.105480 |
| 4 | 6 | 0 | -0.100964 | 1.665902 | -0.064580 |
| 5 | 1 | 0 | -0.184243 | 2.656553 | 0.386898 |
| 6 | 1 | 0 | -0.395625 | 1.724221 | -1.116483 |

| | | | | | |
|----|---|---|-----------|-----------|-----------|
| 7 | 7 | 0 | -1.009817 | 0.774607 | 0.689459 |
| 8 | 7 | 0 | -1.642843 | -0.048082 | 0.016135 |
| 9 | 7 | 0 | 1.534244 | -0.116549 | -0.621685 |
| 10 | 7 | 0 | 1.111003 | -1.110543 | -0.015348 |
| 11 | 7 | 0 | -2.289206 | -0.865481 | -0.480624 |
| 12 | 7 | 0 | 0.801339 | -2.129252 | 0.434159 |

ggg, E = -406.202462 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|------------------|------------------|----------------|-------------------------|-----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | -0.447556 | 1.487767 | -0.385723 |
| 2 | 1 | 0 | -1.232987 | 2.132593 | 0.025222 |
| 3 | 1 | 0 | -0.017667 | 1.961751 | -1.267376 |
| 4 | 6 | 0 | 0.632579 | 1.261974 | 0.663102 |
| 5 | 1 | 0 | 1.040081 | 2.224821 | 0.973825 |
| 6 | 1 | 0 | 0.221398 | 0.758808 | 1.546738 |
| 7 | 7 | 0 | 1.772887 | 0.496968 | 0.122207 |
| 8 | 7 | 0 | 1.578500 | -0.715185 | -0.040558 |
| 9 | 7 | 0 | -1.020266 | 0.211431 | -0.867916 |
| 10 | 7 | 0 | -1.697341 | -0.411660 | -0.040058 |
| 11 | 7 | 0 | 1.559537 | -1.856493 | -0.217391 |
| 12 | 7 | 0 | -2.353455 | -1.093120 | 0.623334 |

2-Azidoethanamine

aaa, E = -298.1491479 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|------------------|------------------|----------------|-------------------------|-----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | -1.497475 | 0.745199 | 0.000000 |
| 2 | 1 | 0 | -1.945644 | 0.280350 | 0.882272 |
| 3 | 1 | 0 | -1.945644 | 0.280350 | -0.882272 |
| 4 | 6 | 0 | 0.000000 | 0.462392 | 0.000000 |
| 5 | 1 | 0 | 0.467599 | 0.895570 | -0.892147 |
| 6 | 1 | 0 | 0.467599 | 0.895570 | 0.892147 |
| 7 | 7 | 0 | 0.183365 | -1.010877 | 0.000000 |
| 8 | 7 | 0 | 1.356517 | -1.395607 | 0.000000 |
| 9 | 7 | 0 | 2.405326 | -1.880203 | 0.000000 |
| 10 | 7 | 0 | -1.830167 | 2.166389 | 0.000000 |
| 11 | 1 | 0 | -1.432171 | 2.622353 | 0.815367 |
| 12 | 1 | 0 | -1.432171 | 2.622353 | -0.815367 |

aag, E = -298.1488009 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|------------------|------------------|----------------|-------------------------|-----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | 1.578840 | 0.494193 | -0.046904 |
| 2 | 1 | 0 | 1.585238 | 1.189257 | 0.803174 |
| 3 | 1 | 0 | 1.559594 | 1.087176 | -0.964555 |
| 4 | 6 | 0 | 0.317121 | -0.347028 | 0.023946 |

| | | | | | |
|----|---|---|-----------|-----------|-----------|
| 5 | 1 | 0 | 0.222712 | -0.958590 | -0.879055 |
| 6 | 1 | 0 | 0.348839 | -1.007194 | 0.898843 |
| 7 | 7 | 0 | -0.835753 | 0.578788 | 0.144627 |
| 8 | 7 | 0 | -1.945954 | 0.055824 | 0.009787 |
| 9 | 7 | 0 | -3.036517 | -0.310495 | -0.094436 |
| 10 | 7 | 0 | 2.738771 | -0.397472 | -0.093763 |
| 11 | 1 | 0 | 3.575563 | 0.137171 | -0.303041 |
| 12 | 1 | 0 | 2.888470 | -0.817326 | 0.818879 |

gaa, E = -298.149675 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|------------------|------------------|----------------|-------------------------|-----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | 1.196130 | -0.351112 | -0.383638 |
| 2 | 1 | 0 | 1.211413 | -0.176879 | -1.462921 |
| 3 | 1 | 0 | 0.677017 | -1.299625 | -0.212455 |
| 4 | 6 | 0 | 0.413076 | 0.780080 | 0.284724 |
| 5 | 1 | 0 | 0.365572 | 0.624738 | 1.369339 |
| 6 | 1 | 0 | 0.890888 | 1.741366 | 0.091044 |
| 7 | 7 | 0 | -0.957237 | 0.904696 | -0.269284 |
| 8 | 7 | 0 | -1.717566 | -0.035664 | -0.012639 |
| 9 | 7 | 0 | -2.532875 | -0.836613 | 0.159625 |
| 10 | 7 | 0 | 2.569799 | -0.487162 | 0.091398 |
| 11 | 1 | 0 | 3.083153 | 0.374440 | -0.068202 |
| 12 | 1 | 0 | 2.581872 | -0.654652 | 1.092985 |

gag, E = -298.1491991 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|------------------|------------------|----------------|-------------------------|-----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | -1.186362 | -0.369221 | 0.328003 |
| 2 | 1 | 0 | -1.157814 | -0.278676 | 1.422000 |
| 3 | 1 | 0 | -0.699408 | -1.311613 | 0.058938 |
| 4 | 6 | 0 | -0.403406 | 0.789937 | -0.275706 |
| 5 | 1 | 0 | -0.346784 | 0.683741 | -1.364063 |
| 6 | 1 | 0 | -0.884590 | 1.740513 | -0.041490 |
| 7 | 7 | 0 | 0.958126 | 0.892111 | 0.302232 |
| 8 | 7 | 0 | 1.719611 | -0.039905 | 0.019930 |
| 9 | 7 | 0 | 2.534327 | -0.837176 | -0.169860 |
| 10 | 7 | 0 | -2.537544 | -0.375762 | -0.235319 |
| 11 | 1 | 0 | -3.020042 | -1.226306 | 0.036940 |
| 12 | 1 | 0 | -3.074398 | 0.393164 | 0.155018 |

gag⁻, E = -298.1491328 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|------------------|------------------|----------------|-------------------------|-----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | 1.204808 | -0.306163 | -0.392588 |
| 2 | 1 | 0 | 1.268485 | -0.096209 | -1.463234 |
| 3 | 1 | 0 | 0.672104 | -1.260243 | -0.270390 |
| 4 | 6 | 0 | 0.401722 | 0.803570 | 0.273940 |
| 5 | 1 | 0 | 0.354984 | 0.647732 | 1.358528 |

| | | | | | |
|----|---|---|-----------|-----------|-----------|
| 6 | 1 | 0 | 0.863544 | 1.770752 | 0.079814 |
| 7 | 7 | 0 | -0.970102 | 0.895292 | -0.279506 |
| 8 | 7 | 0 | -1.713480 | -0.055719 | -0.012987 |
| 9 | 7 | 0 | -2.515578 | -0.867882 | 0.167767 |
| 10 | 7 | 0 | 2.558062 | -0.316794 | 0.164815 |
| 11 | 1 | 0 | 2.540050 | -0.695126 | 1.107305 |
| 12 | 1 | 0 | 3.149332 | -0.935623 | -0.380759 |

aga, E = -298.1508327 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|------------------|------------------|----------------|-------------------------|-----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | -1.756393 | 0.481560 | -0.164318 |
| 2 | 1 | 0 | -1.842999 | 0.671837 | -1.238082 |
| 3 | 1 | 0 | -2.433566 | 1.171787 | 0.347231 |
| 4 | 6 | 0 | -0.335966 | 0.805340 | 0.274869 |
| 5 | 1 | 0 | -0.100291 | 1.857710 | 0.078737 |
| 6 | 1 | 0 | -0.214977 | 0.602563 | 1.345643 |
| 7 | 7 | 0 | 0.580992 | -0.063053 | -0.506711 |
| 8 | 7 | 0 | 1.738732 | -0.128653 | -0.083781 |
| 9 | 7 | 0 | 2.847480 | -0.267542 | 0.209079 |
| 10 | 7 | 0 | -2.190299 | -0.886567 | 0.100948 |
| 11 | 1 | 0 | -1.538103 | -1.533612 | -0.333228 |
| 12 | 1 | 0 | -2.154251 | -1.070980 | 1.099644 |

agg, E = -298.1508842 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|------------------|------------------|----------------|-------------------------|-----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | 1.745881 | 0.487190 | 0.168493 |
| 2 | 1 | 0 | 1.832861 | 0.637624 | 1.253560 |
| 3 | 1 | 0 | 2.415381 | 1.198451 | -0.323345 |
| 4 | 6 | 0 | 0.329392 | 0.814316 | -0.251796 |
| 5 | 1 | 0 | 0.080459 | 1.850157 | 0.001672 |
| 6 | 1 | 0 | 0.216119 | 0.660096 | -1.330154 |
| 7 | 7 | 0 | -0.576318 | -0.106304 | 0.485130 |
| 8 | 7 | 0 | -1.742211 | -0.137722 | 0.080909 |
| 9 | 7 | 0 | -2.855988 | -0.255059 | -0.201867 |
| 10 | 7 | 0 | 2.095432 | -0.864869 | -0.267917 |
| 11 | 1 | 0 | 3.051416 | -1.075838 | 0.002308 |
| 12 | 1 | 0 | 1.505721 | -1.531853 | 0.221990 |

gga, E = -298.1508857 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|------------------|------------------|----------------|-------------------------|-----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | 1.317476 | -0.043699 | 0.678770 |
| 2 | 1 | 0 | 0.707082 | -0.688939 | 1.319801 |
| 3 | 1 | 0 | 2.079136 | 0.413316 | 1.318331 |
| 4 | 6 | 0 | 0.444383 | 1.073664 | 0.113913 |
| 5 | 1 | 0 | 0.025899 | 1.685692 | 0.921870 |
| 6 | 1 | 0 | 1.025198 | 1.714917 | -0.550533 |

| | | | | | |
|----|---|---|-----------|-----------|-----------|
| 7 | 7 | 0 | -0.653252 | 0.538101 | -0.732701 |
| 8 | 7 | 0 | -1.528318 | -0.085316 | -0.121356 |
| 9 | 7 | 0 | -2.413669 | -0.678834 | 0.325700 |
| 10 | 7 | 0 | 1.981864 | -0.878222 | -0.318018 |
| 11 | 1 | 0 | 1.290232 | -1.270470 | -0.950543 |
| 12 | 1 | 0 | 2.594927 | -0.304411 | -0.890395 |

ggg, E = -298.1508233 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|------------------|------------------|----------------|-------------------------|-----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | 1.320887 | -0.012216 | 0.662417 |
| 2 | 1 | 0 | 0.716045 | -0.657429 | 1.317473 |
| 3 | 1 | 0 | 2.089785 | 0.455638 | 1.284543 |
| 4 | 6 | 0 | 0.437081 | 1.088669 | 0.103548 |
| 5 | 1 | 0 | 0.015933 | 1.695653 | 0.912173 |
| 6 | 1 | 0 | 1.009275 | 1.727963 | -0.568252 |
| 7 | 7 | 0 | -0.661768 | 0.535003 | -0.732779 |
| 8 | 7 | 0 | -1.521292 | -0.099473 | -0.110763 |
| 9 | 7 | 0 | -2.392442 | -0.705627 | 0.347074 |
| 10 | 7 | 0 | 1.975459 | -0.732902 | -0.429293 |
| 11 | 1 | 0 | 2.550210 | -1.480221 | -0.051696 |
| 12 | 1 | 0 | 1.271234 | -1.179335 | -1.009704 |

ggg⁻, E = -298.1493907 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|------------------|------------------|----------------|-------------------------|-----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | 1.280308 | -0.056434 | 0.631425 |
| 2 | 1 | 0 | 0.672578 | -0.619467 | 1.347303 |
| 3 | 1 | 0 | 2.151871 | 0.328816 | 1.179998 |
| 4 | 6 | 0 | 0.497393 | 1.152096 | 0.142602 |
| 5 | 1 | 0 | 0.228561 | 1.786076 | 0.994886 |
| 6 | 1 | 0 | 1.093243 | 1.745328 | -0.552939 |
| 7 | 7 | 0 | -0.728444 | 0.796436 | -0.613745 |
| 8 | 7 | 0 | -1.440279 | -0.066801 | -0.094452 |
| 9 | 7 | 0 | -2.187686 | -0.866798 | 0.276618 |
| 10 | 7 | 0 | 1.616355 | -0.947116 | -0.477905 |
| 11 | 1 | 0 | 2.243730 | -0.471537 | -1.120439 |
| 12 | 1 | 0 | 2.124185 | -1.753229 | -0.126582 |

g-ga, E = -298.1502543 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|------------------|------------------|----------------|-------------------------|-----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | 1.682521 | -0.123308 | -0.122471 |
| 2 | 1 | 0 | 1.908780 | -0.365460 | -1.164383 |
| 3 | 1 | 0 | 2.577679 | -0.343585 | 0.468947 |
| 4 | 6 | 0 | 0.572305 | -1.050722 | 0.368301 |
| 5 | 1 | 0 | 0.879552 | -2.092678 | 0.260924 |
| 6 | 1 | 0 | 0.346508 | -0.857579 | 1.423756 |
| 7 | 7 | 0 | -0.661856 | -0.910889 | -0.443190 |

| | | | | | |
|----|---|---|-----------|-----------|-----------|
| 8 | 7 | 0 | -1.451491 | -0.033824 | -0.077330 |
| 9 | 7 | 0 | -2.289956 | 0.721454 | 0.172953 |
| 10 | 7 | 0 | 1.402215 | 1.305281 | -0.037247 |
| 11 | 1 | 0 | 0.654828 | 1.566248 | -0.671500 |
| 12 | 1 | 0 | 1.111321 | 1.563090 | 0.900976 |

g⁻gg, E = -298.1504465 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|------------------|------------------|----------------|-------------------------|-----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | 1.673695 | -0.125480 | -0.097829 |
| 2 | 1 | 0 | 1.960660 | -0.368974 | -1.129035 |
| 3 | 1 | 0 | 2.542659 | -0.302691 | 0.543089 |
| 4 | 6 | 0 | 0.573932 | -1.075935 | 0.346249 |
| 5 | 1 | 0 | 0.878105 | -2.111802 | 0.189085 |
| 6 | 1 | 0 | 0.345266 | -0.923430 | 1.406138 |
| 7 | 7 | 0 | -0.654856 | -0.893381 | -0.466488 |
| 8 | 7 | 0 | -1.440975 | -0.026104 | -0.069810 |
| 9 | 7 | 0 | -2.275972 | 0.725989 | 0.198996 |
| 10 | 7 | 0 | 1.238089 | 1.262895 | 0.072221 |
| 11 | 1 | 0 | 2.044624 | 1.878722 | 0.080999 |
| 12 | 1 | 0 | 0.678923 | 1.550862 | -0.725240 |

g⁻gg⁻, E = -298.1510454 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|------------------|------------------|----------------|-------------------------|-----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | 1.615678 | -0.111372 | -0.217111 |
| 2 | 1 | 0 | 1.670679 | -0.267608 | -1.297519 |
| 3 | 1 | 0 | 2.597013 | -0.362104 | 0.211327 |
| 4 | 6 | 0 | 0.594649 | -1.078472 | 0.360562 |
| 5 | 1 | 0 | 0.930756 | -2.106857 | 0.223839 |
| 6 | 1 | 0 | 0.459327 | -0.898347 | 1.434358 |
| 7 | 7 | 0 | -0.709207 | -0.997682 | -0.332107 |
| 8 | 7 | 0 | -1.419141 | -0.021044 | -0.069314 |
| 9 | 7 | 0 | -2.211511 | 0.803655 | 0.094987 |
| 10 | 7 | 0 | 1.193616 | 1.266972 | 0.029888 |
| 11 | 1 | 0 | 1.335739 | 1.500926 | 1.008519 |
| 12 | 1 | 0 | 1.768223 | 1.909745 | -0.505412 |

2-Azidoethylammonium ion

aa, E = -298.5865044 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|------------------|------------------|----------------|-------------------------|-----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | 1.477465 | 0.532445 | -0.043634 |
| 2 | 1 | 0 | 1.535983 | 1.222608 | 0.796773 |
| 3 | 1 | 0 | 1.482651 | 1.089359 | -0.979076 |
| 4 | 6 | 0 | 0.246114 | -0.350368 | 0.060585 |
| 5 | 1 | 0 | 0.188328 | -1.031409 | -0.796120 |

| | | | | | |
|----|---|---|-----------|-----------|-----------|
| 6 | 1 | 0 | 0.266296 | -0.936973 | 0.986354 |
| 7 | 7 | 0 | -0.890463 | 0.585832 | 0.065446 |
| 8 | 7 | 0 | -2.004945 | 0.048082 | -0.001288 |
| 9 | 7 | 0 | -3.096112 | -0.316907 | -0.057731 |
| 10 | 7 | 0 | 2.718202 | -0.303506 | -0.017120 |
| 11 | 1 | 0 | 2.811590 | -0.819116 | 0.861398 |
| 12 | 1 | 0 | 2.731213 | -0.987129 | -0.778028 |
| 13 | 1 | 0 | 3.555686 | 0.275696 | -0.118156 |

ag, E = -298.5861613 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|------------------|------------------|----------------|-------------------------|-----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | 1.150524 | -0.309287 | -0.404845 |
| 2 | 1 | 0 | 1.234046 | -0.087751 | -1.467749 |
| 3 | 1 | 0 | 0.730189 | -1.305900 | -0.270335 |
| 4 | 6 | 0 | 0.317797 | 0.752469 | 0.306014 |
| 5 | 1 | 0 | 0.225737 | 0.529336 | 1.374744 |
| 6 | 1 | 0 | 0.771392 | 1.737352 | 0.190033 |
| 7 | 7 | 0 | -1.004483 | 0.846446 | -0.332019 |
| 8 | 7 | 0 | -1.804789 | -0.049663 | -0.018104 |
| 9 | 7 | 0 | -2.654475 | -0.800574 | 0.187467 |
| 10 | 7 | 0 | 2.542301 | -0.346752 | 0.149929 |
| 11 | 1 | 0 | 3.028875 | 0.543371 | 0.013727 |
| 12 | 1 | 0 | 2.548596 | -0.552551 | 1.152315 |
| 13 | 1 | 0 | 3.101360 | -1.069133 | -0.310662 |

ga, E = -298.5922117 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|------------------|------------------|----------------|-------------------------|-----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | -1.672371 | 0.589770 | -0.224245 |
| 2 | 1 | 0 | -1.740339 | 0.663552 | -1.308716 |
| 3 | 1 | 0 | -2.382414 | 1.272006 | 0.240442 |
| 4 | 6 | 0 | -0.261283 | 0.850846 | 0.254790 |
| 5 | 1 | 0 | 0.047809 | 1.842480 | -0.088478 |
| 6 | 1 | 0 | -0.206200 | 0.816755 | 1.348671 |
| 7 | 7 | 0 | 0.570025 | -0.213191 | -0.344033 |
| 8 | 7 | 0 | 1.776364 | -0.160456 | -0.065543 |
| 9 | 7 | 0 | 2.911775 | -0.217320 | 0.116145 |
| 10 | 7 | 0 | -2.066028 | -0.806295 | 0.141297 |
| 11 | 1 | 0 | -1.361690 | -1.465408 | -0.206868 |
| 12 | 1 | 0 | -2.128624 | -0.929615 | 1.154768 |
| 13 | 1 | 0 | -2.971570 | -1.062629 | -0.258154 |

gg, E = -298.5908914 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|------------------|------------------|----------------|-------------------------|-----------|----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | 1.313064 | 0.190958 | 0.714875 |
| 2 | 1 | 0 | 0.803022 | -0.410531 | 1.467724 |
| 3 | 1 | 0 | 2.101306 | 0.776516 | 1.187325 |

| | | | | | |
|----|---|---|-----------|-----------|-----------|
| 4 | 6 | 0 | 0.340921 | 1.077396 | -0.045953 |
| 5 | 1 | 0 | -0.146588 | 1.759067 | 0.656247 |
| 6 | 1 | 0 | 0.860648 | 1.670468 | -0.799747 |
| 7 | 7 | 0 | -0.638983 | 0.251494 | -0.782699 |
| 8 | 7 | 0 | -1.604356 | -0.138105 | -0.103972 |
| 9 | 7 | 0 | -2.555062 | -0.550021 | 0.399458 |
| 10 | 7 | 0 | 1.958838 | -0.764143 | -0.239342 |
| 11 | 1 | 0 | 1.240941 | -1.257064 | -0.780435 |
| 12 | 1 | 0 | 2.566936 | -0.281024 | -0.905091 |
| 13 | 1 | 0 | 2.526760 | -1.462126 | 0.246325 |

2-Azidoethanol

aaa, E = -318.0004202 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|---------------|---------------|-------------|-------------------------|-----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | -1.583286 | 0.475138 | -0.082319 |
| 2 | 1 | 0 | -1.551842 | 0.977690 | -1.054534 |
| 3 | 1 | 0 | -1.630337 | 1.233029 | 0.707322 |
| 4 | 6 | 0 | -0.332873 | -0.360464 | 0.099127 |
| 5 | 1 | 0 | -0.391184 | -0.919129 | 1.038879 |
| 6 | 1 | 0 | -0.225037 | -1.063622 | -0.732764 |
| 7 | 7 | 0 | 0.810730 | 0.579032 | 0.138313 |
| 8 | 7 | 0 | 1.923217 | 0.061515 | -0.000657 |
| 9 | 7 | 0 | 3.015028 | -0.296482 | -0.113406 |
| 10 | 1 | 0 | -3.477512 | 0.071303 | -0.221260 |
| 11 | 8 | 0 | -2.683744 | -0.424471 | -0.001029 |

aag, E = -318.0005807 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|---------------|---------------|-------------|-------------------------|-----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | -1.592385 | 0.491686 | -0.057252 |
| 2 | 1 | 0 | -1.565255 | 1.064663 | -0.984913 |
| 3 | 1 | 0 | -1.644353 | 1.190914 | 0.784299 |
| 4 | 6 | 0 | -0.335391 | -0.354671 | 0.060404 |
| 5 | 1 | 0 | -0.372563 | -0.968912 | 0.967562 |
| 6 | 1 | 0 | -0.245073 | -1.010199 | -0.811701 |
| 7 | 7 | 0 | 0.811989 | 0.578845 | 0.134994 |
| 8 | 7 | 0 | 1.923613 | 0.056469 | 0.005771 |
| 9 | 7 | 0 | 3.014682 | -0.306765 | -0.097439 |
| 10 | 1 | 0 | -2.845482 | -0.770479 | 0.724284 |
| 11 | 8 | 0 | -2.751575 | -0.328490 | -0.125215 |

gaa, E = -318.0007332 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|---------------|---------------|-------------|-------------------------|-----------|----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | -1.220647 | -0.343722 | 0.361980 |
| 2 | 1 | 0 | -1.290878 | -0.170755 | 1.440999 |

| | | | | | |
|----|---|---|-----------|-----------|-----------|
| 3 | 1 | 0 | -0.716576 | -1.302783 | 0.190658 |
| 4 | 6 | 0 | -0.420883 | 0.781326 | -0.273251 |
| 5 | 1 | 0 | -0.352527 | 0.635601 | -1.356374 |
| 6 | 1 | 0 | -0.896797 | 1.740569 | -0.073405 |
| 7 | 7 | 0 | 0.929964 | 0.870622 | 0.323900 |
| 8 | 7 | 0 | 1.705298 | -0.044104 | 0.019728 |
| 9 | 7 | 0 | 2.535478 | -0.819470 | -0.189236 |
| 10 | 1 | 0 | -3.055391 | -0.963090 | 0.211704 |
| 11 | 8 | 0 | -2.504228 | -0.326812 | -0.253337 |

gag, E = -318.0008458 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|------------------|------------------|----------------|-------------------------|-----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | 1.223562 | -0.334771 | -0.391427 |
| 2 | 1 | 0 | 1.288162 | -0.126315 | -1.460240 |
| 3 | 1 | 0 | 0.720098 | -1.299636 | -0.256139 |
| 4 | 6 | 0 | 0.426939 | 0.771282 | 0.292545 |
| 5 | 1 | 0 | 0.363637 | 0.592149 | 1.372470 |
| 6 | 1 | 0 | 0.906381 | 1.734933 | 0.124184 |
| 7 | 7 | 0 | -0.929881 | 0.887263 | -0.286616 |
| 8 | 7 | 0 | -1.704229 | -0.038866 | -0.015625 |
| 9 | 7 | 0 | -2.534186 | -0.821468 | 0.166419 |
| 10 | 1 | 0 | 2.524181 | -0.657302 | 1.014805 |
| 11 | 8 | 0 | 2.559075 | -0.381425 | 0.093619 |

gag⁻, E = -318.0008896 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|------------------|------------------|----------------|-------------------------|-----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | -1.213862 | -0.369840 | 0.357731 |
| 2 | 1 | 0 | -1.257693 | -0.213445 | 1.440883 |
| 3 | 1 | 0 | -0.717540 | -1.323863 | 0.166333 |
| 4 | 6 | 0 | -0.427816 | 0.765792 | -0.289090 |
| 5 | 1 | 0 | -0.362169 | 0.611522 | -1.371171 |
| 6 | 1 | 0 | -0.913272 | 1.724030 | -0.099857 |
| 7 | 7 | 0 | 0.922858 | 0.884586 | 0.304654 |
| 8 | 7 | 0 | 1.707053 | -0.029175 | 0.020223 |
| 9 | 7 | 0 | 2.543778 | -0.802064 | -0.171601 |
| 10 | 1 | 0 | -3.006819 | 0.305410 | 0.043339 |
| 11 | 8 | 0 | -2.513533 | -0.481599 | -0.208038 |

aga, E = -318.0016756 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|------------------|------------------|----------------|-------------------------|----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | 1.743486 | 0.453821 | 0.165647 |
| 2 | 1 | 0 | 1.801413 | 0.571541 | 1.252959 |
| 3 | 1 | 0 | 2.419074 | 1.177040 | -0.305681 |
| 4 | 6 | 0 | 0.337242 | 0.748730 | -0.293408 |
| 5 | 1 | 0 | 0.123848 | 1.815418 | -0.165375 |
| 6 | 1 | 0 | 0.233603 | 0.484151 | -1.351293 |

| | | | | | |
|----|---|---|-----------|-----------|-----------|
| 7 | 7 | 0 | -0.601656 | -0.048591 | 0.530694 |
| 8 | 7 | 0 | -1.753127 | -0.126251 | 0.093110 |
| 9 | 7 | 0 | -2.858547 | -0.273874 | -0.207170 |
| 10 | 1 | 0 | 2.885262 | -1.116740 | 0.220834 |
| 11 | 8 | 0 | 2.068218 | -0.875713 | -0.225164 |

agg, E = -318.0013071 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|------------------|------------------|----------------|-------------------------|-----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | -1.753406 | 0.452941 | -0.159117 |
| 2 | 1 | 0 | -1.827870 | 0.630486 | -1.233277 |
| 3 | 1 | 0 | -2.433227 | 1.141944 | 0.355783 |
| 4 | 6 | 0 | -0.341624 | 0.745943 | 0.305167 |
| 5 | 1 | 0 | -0.135800 | 1.816782 | 0.192550 |
| 6 | 1 | 0 | -0.224514 | 0.475172 | 1.361451 |
| 7 | 7 | 0 | 0.598523 | -0.036412 | -0.528707 |
| 8 | 7 | 0 | 1.749944 | -0.120200 | -0.091798 |
| 9 | 7 | 0 | 2.855554 | -0.272179 | 0.205565 |
| 10 | 1 | 0 | -2.121934 | -1.064144 | 0.992810 |
| 11 | 8 | 0 | -2.139328 | -0.899001 | 0.044871 |

agg⁻, E = -318.0039706 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|------------------|------------------|----------------|-------------------------|-----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | 1.772387 | 0.427884 | 0.149430 |
| 2 | 1 | 0 | 1.894233 | 0.572577 | 1.229093 |
| 3 | 1 | 0 | 2.487852 | 1.064958 | -0.373240 |
| 4 | 6 | 0 | 0.367720 | 0.820886 | -0.255344 |
| 5 | 1 | 0 | 0.179157 | 1.872896 | -0.015978 |
| 6 | 1 | 0 | 0.228609 | 0.654322 | -1.328437 |
| 7 | 7 | 0 | -0.555902 | -0.047633 | 0.517575 |
| 8 | 7 | 0 | -1.710733 | -0.114236 | 0.084115 |
| 9 | 7 | 0 | -2.816259 | -0.253211 | -0.217083 |
| 10 | 1 | 0 | 1.394961 | -1.460422 | 0.195494 |
| 11 | 8 | 0 | 2.069351 | -0.911424 | -0.220462 |

gga, E = -318.0016592 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|------------------|------------------|----------------|-------------------------|-----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | 1.304772 | -0.115357 | 0.628581 |
| 2 | 1 | 0 | 0.683501 | -0.834900 | 1.176165 |
| 3 | 1 | 0 | 2.081076 | 0.255653 | 1.308812 |
| 4 | 6 | 0 | 0.463437 | 1.062990 | 0.186323 |
| 5 | 1 | 0 | 0.106769 | 1.609619 | 1.066539 |
| 6 | 1 | 0 | 1.057105 | 1.736556 | -0.431219 |
| 7 | 7 | 0 | -0.685358 | 0.665297 | -0.661457 |
| 8 | 7 | 0 | -1.509766 | -0.074191 | -0.114521 |
| 9 | 7 | 0 | -2.351651 | -0.764767 | 0.272669 |
| 10 | 1 | 0 | 2.284186 | -1.538934 | -0.255538 |

11 8 0 1.875692 -0.712271 -0.528877

ggg, E = -318.0018435 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|------------------|------------------|----------------|-------------------------|-----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | 1.303060 | -0.124355 | 0.633460 |
| 2 | 1 | 0 | 0.687379 | -0.773535 | 1.260870 |
| 3 | 1 | 0 | 2.143315 | 0.234957 | 1.240084 |
| 4 | 6 | 0 | 0.499365 | 1.082543 | 0.177051 |
| 5 | 1 | 0 | 0.181079 | 1.659373 | 1.053697 |
| 6 | 1 | 0 | 1.102176 | 1.729220 | -0.462055 |
| 7 | 7 | 0 | -0.676135 | 0.717514 | -0.646318 |
| 8 | 7 | 0 | -1.478260 | -0.053878 | -0.109947 |
| 9 | 7 | 0 | -2.304202 | -0.766814 | 0.270585 |
| 10 | 1 | 0 | 2.305285 | -0.390530 | -1.007046 |
| 11 | 8 | 0 | 1.747048 | -0.935796 | -0.443607 |

ggg⁻, E = -318.0034583 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|------------------|------------------|----------------|-------------------------|-----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | 1.346096 | -0.058817 | 0.658595 |
| 2 | 1 | 0 | 0.750179 | -0.722928 | 1.298001 |
| 3 | 1 | 0 | 2.139165 | 0.381411 | 1.266602 |
| 4 | 6 | 0 | 0.467936 | 1.048792 | 0.105075 |
| 5 | 1 | 0 | 0.050683 | 1.653261 | 0.918137 |
| 6 | 1 | 0 | 1.045656 | 1.687832 | -0.562090 |
| 7 | 7 | 0 | -0.621996 | 0.491441 | -0.737466 |
| 8 | 7 | 0 | -1.523508 | -0.081261 | -0.111849 |
| 9 | 7 | 0 | -2.432454 | -0.626316 | 0.347318 |
| 10 | 1 | 0 | 1.291061 | -1.098383 | -0.970215 |
| 11 | 8 | 0 | 1.985596 | -0.791011 | -0.377309 |

g⁻ga, E = -318.0038721 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|------------------|------------------|----------------|-------------------------|-----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | 1.607016 | -0.017422 | -0.205679 |
| 2 | 1 | 0 | 1.686623 | -0.134930 | -1.291564 |
| 3 | 1 | 0 | 2.594772 | -0.167440 | 0.246640 |
| 4 | 6 | 0 | 0.655014 | -1.056400 | 0.344579 |
| 5 | 1 | 0 | 1.051936 | -2.055496 | 0.164126 |
| 6 | 1 | 0 | 0.526150 | -0.914691 | 1.423388 |
| 7 | 7 | 0 | -0.656818 | -1.021348 | -0.336317 |
| 8 | 7 | 0 | -1.386822 | -0.060472 | -0.065220 |
| 9 | 7 | 0 | -2.187710 | 0.754761 | 0.100979 |
| 10 | 1 | 0 | 1.599450 | 1.926140 | -0.320756 |
| 11 | 8 | 0 | 1.073543 | 1.259846 | 0.131083 |

g⁻gg, E = -318.0034179 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|------------------|------------------|----------------|-------------------------|-----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | 1.600962 | -0.010803 | -0.233079 |
| 2 | 1 | 0 | 1.659469 | -0.149080 | -1.313796 |
| 3 | 1 | 0 | 2.600650 | -0.146841 | 0.196198 |
| 4 | 6 | 0 | 0.660964 | -1.046295 | 0.359466 |
| 5 | 1 | 0 | 1.062595 | -2.048096 | 0.201032 |
| 6 | 1 | 0 | 0.540094 | -0.884538 | 1.437524 |
| 7 | 7 | 0 | -0.658677 | -1.036358 | -0.304592 |
| 8 | 7 | 0 | -1.386373 | -0.066658 | -0.060877 |
| 9 | 7 | 0 | -2.187293 | 0.752563 | 0.087292 |
| 10 | 1 | 0 | 1.215953 | 1.514789 | 0.906750 |
| 11 | 8 | 0 | 1.122011 | 1.313691 | -0.029848 |

Protonated 2-azidoethanol

aaa, E = -318.3826646 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|------------------|------------------|----------------|-------------------------|-----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | 1.430642 | 0.510843 | -0.183859 |
| 2 | 1 | 0 | 1.543483 | 1.356913 | 0.488913 |
| 3 | 1 | 0 | 1.397615 | 0.837636 | -1.219282 |
| 4 | 6 | 0 | 0.266546 | -0.381771 | 0.200254 |
| 5 | 1 | 0 | 0.116831 | -1.166319 | -0.547576 |
| 6 | 1 | 0 | 0.429560 | -0.839129 | 1.181968 |
| 7 | 7 | 0 | -0.870651 | 0.551985 | 0.246377 |
| 8 | 7 | 0 | -1.976393 | 0.045308 | 0.005092 |
| 9 | 7 | 0 | -3.058954 | -0.288675 | -0.197384 |
| 10 | 1 | 0 | 2.976617 | -0.453234 | 0.839736 |
| 11 | 1 | 0 | 2.815440 | -0.994773 | -0.644034 |
| 12 | 8 | 0 | 2.734914 | -0.209482 | -0.072086 |

aag, E = -318.3831717 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|------------------|------------------|----------------|-------------------------|-----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | -1.446315 | 0.527605 | 0.103099 |
| 2 | 1 | 0 | -1.554093 | 1.265325 | -0.688556 |
| 3 | 1 | 0 | -1.454620 | 0.987144 | 1.087059 |
| 4 | 6 | 0 | -0.259573 | -0.388393 | -0.102208 |
| 5 | 1 | 0 | -0.137848 | -1.048634 | 0.760602 |
| 6 | 1 | 0 | -0.385316 | -0.989971 | -1.008668 |
| 7 | 7 | 0 | 0.871609 | 0.541606 | -0.249451 |
| 8 | 7 | 0 | 1.983875 | 0.049325 | -0.009548 |
| 9 | 7 | 0 | 3.071787 | -0.275447 | 0.179835 |
| 10 | 1 | 0 | -3.450283 | 0.093295 | 0.485962 |
| 11 | 1 | 0 | -2.911528 | -0.653636 | -0.801123 |
| 12 | 8 | 0 | -2.670235 | -0.337147 | 0.089190 |

gaa, E = -318.3826259 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|---------------|---------------|-------------|-------------------------|-----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | 1.150910 | -0.290268 | -0.428297 |
| 2 | 1 | 0 | 1.293606 | -0.004239 | -1.467050 |
| 3 | 1 | 0 | 0.763302 | -1.303431 | -0.354062 |
| 4 | 6 | 0 | 0.331611 | 0.725801 | 0.351132 |
| 5 | 1 | 0 | 0.222180 | 0.428049 | 1.398553 |
| 6 | 1 | 0 | 0.786340 | 1.715132 | 0.302849 |
| 7 | 7 | 0 | -0.971447 | 0.837638 | -0.322919 |
| 8 | 7 | 0 | -1.797534 | -0.041887 | -0.021289 |
| 9 | 7 | 0 | -2.669130 | -0.769525 | 0.170809 |
| 10 | 1 | 0 | 3.112133 | 0.361548 | -0.060834 |
| 11 | 1 | 0 | 2.607782 | -0.664115 | 1.042786 |
| 12 | 8 | 0 | 2.548289 | -0.416216 | 0.101818 |

gag, E = -318.3830431 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|---------------|---------------|-------------|-------------------------|-----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | -1.148431 | -0.269522 | 0.435074 |
| 2 | 1 | 0 | -1.320907 | 0.004887 | 1.473304 |
| 3 | 1 | 0 | -0.742411 | -1.274222 | 0.346680 |
| 4 | 6 | 0 | -0.328379 | 0.757039 | -0.324480 |
| 5 | 1 | 0 | -0.243336 | 0.480054 | -1.378796 |
| 6 | 1 | 0 | -0.769996 | 1.750004 | -0.242424 |
| 7 | 7 | 0 | 0.985187 | 0.842356 | 0.333861 |
| 8 | 7 | 0 | 1.788004 | -0.053183 | 0.017261 |
| 9 | 7 | 0 | 2.639223 | -0.800978 | -0.189069 |
| 10 | 1 | 0 | -2.977785 | -1.182673 | 0.009624 |
| 11 | 1 | 0 | -3.068686 | 0.392283 | -0.088881 |
| 12 | 8 | 0 | -2.487864 | -0.376600 | -0.239680 |

gag⁻, E = -318.383147 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|---------------|---------------|-------------|-------------------------|-----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | 1.182077 | -0.263462 | -0.448402 |
| 2 | 1 | 0 | 1.354427 | 0.098567 | -1.458418 |
| 3 | 1 | 0 | 0.824121 | -1.291107 | -0.445830 |
| 4 | 6 | 0 | 0.321791 | 0.691858 | 0.357340 |
| 5 | 1 | 0 | 0.202233 | 0.345324 | 1.388303 |
| 6 | 1 | 0 | 0.771468 | 1.683794 | 0.359025 |
| 7 | 7 | 0 | -0.971305 | 0.812386 | -0.332913 |
| 8 | 7 | 0 | -1.815157 | -0.047209 | -0.026028 |
| 9 | 7 | 0 | -2.700684 | -0.756434 | 0.170646 |
| 10 | 1 | 0 | 2.600045 | -0.778800 | 1.006406 |
| 11 | 1 | 0 | 3.248967 | -0.576687 | -0.422205 |
| 12 | 8 | 0 | 2.548195 | -0.264084 | 0.179645 |

aga, E = -318.3907334 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|------------------|------------------|----------------|-------------------------|-----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | -1.736644 | 0.537030 | -0.159023 |
| 2 | 1 | 0 | -1.922700 | 0.646185 | -1.223765 |
| 3 | 1 | 0 | -2.509064 | 1.017741 | 0.434542 |
| 4 | 6 | 0 | -0.326963 | 0.921801 | 0.230708 |
| 5 | 1 | 0 | -0.105800 | 1.914312 | -0.171170 |
| 6 | 1 | 0 | -0.200656 | 0.924461 | 1.317302 |
| 7 | 7 | 0 | 0.504910 | -0.128246 | -0.395761 |
| 8 | 7 | 0 | 1.703213 | -0.127567 | -0.067610 |
| 9 | 7 | 0 | 2.827652 | -0.214805 | 0.150434 |
| 10 | 1 | 0 | -0.981329 | -1.321382 | -0.118403 |
| 11 | 1 | 0 | -2.136014 | -1.168858 | 0.977925 |
| 12 | 8 | 0 | -1.876652 | -0.933890 | 0.068002 |

agg, E = -318.3919006 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|------------------|------------------|----------------|-------------------------|-----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | -1.733114 | 0.541510 | -0.162755 |
| 2 | 1 | 0 | -1.913159 | 0.592894 | -1.234560 |
| 3 | 1 | 0 | -2.490183 | 1.065109 | 0.413223 |
| 4 | 6 | 0 | -0.321481 | 0.922240 | 0.212195 |
| 5 | 1 | 0 | -0.096449 | 1.907795 | -0.203505 |
| 6 | 1 | 0 | -0.200288 | 0.937691 | 1.299017 |
| 7 | 7 | 0 | 0.507160 | -0.140794 | -0.398234 |
| 8 | 7 | 0 | 1.706015 | -0.133272 | -0.071421 |
| 9 | 7 | 0 | 2.830642 | -0.218368 | 0.146787 |
| 10 | 1 | 0 | -2.593731 | -1.364468 | -0.160447 |
| 11 | 1 | 0 | -0.985450 | -1.319489 | -0.040692 |
| 12 | 8 | 0 | -1.837485 | -0.894375 | 0.236299 |

agg⁻, E = -318.3868806 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|------------------|------------------|----------------|-------------------------|-----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | -1.653350 | 0.589146 | -0.210592 |
| 2 | 1 | 0 | -1.715913 | 0.633151 | -1.294624 |
| 3 | 1 | 0 | -2.358520 | 1.264187 | 0.269191 |
| 4 | 6 | 0 | -0.251684 | 0.769627 | 0.295234 |
| 5 | 1 | 0 | 0.014909 | 1.814602 | 0.096984 |
| 6 | 1 | 0 | -0.200960 | 0.603261 | 1.377726 |
| 7 | 7 | 0 | 0.616400 | -0.161171 | -0.439890 |
| 8 | 7 | 0 | 1.803287 | -0.150838 | -0.081464 |
| 9 | 7 | 0 | 2.926723 | -0.244977 | 0.153025 |
| 10 | 1 | 0 | -2.104913 | -1.010518 | 1.059451 |
| 11 | 1 | 0 | -2.954959 | -1.040739 | -0.273083 |
| 12 | 8 | 0 | -2.084289 | -0.814710 | 0.104351 |

gga, E = -318.3894441 a.u.

| Center | Atomic | Atomic | Coordinates (Angstroms) | | |
|--------|--------|--------|-------------------------|--|--|
|--------|--------|--------|-------------------------|--|--|

| Number | Number | Type | X | Y | Z |
|--------|--------|------|-----------|-----------|-----------|
| 1 | 6 | 0 | 1.468326 | 0.456055 | 0.576008 |
| 2 | 1 | 0 | 1.113423 | 0.222847 | 1.576427 |
| 3 | 1 | 0 | 2.368770 | 1.064305 | 0.602083 |
| 4 | 6 | 0 | 0.373696 | 0.978791 | -0.334543 |
| 5 | 1 | 0 | -0.139051 | 1.814915 | 0.146241 |
| 6 | 1 | 0 | 0.782292 | 1.304089 | -1.291560 |
| 7 | 7 | 0 | -0.520563 | -0.168859 | -0.616480 |
| 8 | 7 | 0 | -1.624465 | -0.151371 | -0.041873 |
| 9 | 7 | 0 | -2.677672 | -0.237900 | 0.407858 |
| 10 | 1 | 0 | 1.043675 | -1.288233 | -0.313719 |
| 11 | 1 | 0 | 2.518845 | -0.810031 | -0.696607 |
| 12 | 8 | 0 | 1.877352 | -0.876257 | 0.035226 |

ggg, E = -318.3903229 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|---------------|---------------|-------------|-------------------------|-----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | 1.459322 | 0.418455 | 0.594441 |
| 2 | 1 | 0 | 1.096357 | 0.098336 | 1.569699 |
| 3 | 1 | 0 | 2.350417 | 1.035827 | 0.665535 |
| 4 | 6 | 0 | 0.373055 | 1.011988 | -0.280045 |
| 5 | 1 | 0 | -0.134721 | 1.813670 | 0.259977 |
| 6 | 1 | 0 | 0.796545 | 1.406061 | -1.203772 |
| 7 | 7 | 0 | -0.532737 | -0.096544 | -0.663192 |
| 8 | 7 | 0 | -1.611371 | -0.150800 | -0.043512 |
| 9 | 7 | 0 | -2.646271 | -0.294270 | 0.434162 |
| 10 | 1 | 0 | 2.395365 | -1.438908 | 0.382270 |
| 11 | 1 | 0 | 1.037626 | -1.235129 | -0.466843 |
| 12 | 8 | 0 | 1.874600 | -0.808901 | -0.148181 |

ggg⁻, E = -318.3859741 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|---------------|---------------|-------------|-------------------------|-----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | 1.264981 | 0.035635 | 0.728898 |
| 2 | 1 | 0 | 0.735627 | -0.734594 | 1.285776 |
| 3 | 1 | 0 | 2.058658 | 0.485418 | 1.322830 |
| 4 | 6 | 0 | 0.349278 | 1.065245 | 0.113047 |
| 5 | 1 | 0 | -0.077540 | 1.643120 | 0.940980 |
| 6 | 1 | 0 | 0.908035 | 1.754212 | -0.520812 |
| 7 | 7 | 0 | -0.687474 | 0.469130 | -0.739823 |
| 8 | 7 | 0 | -1.596996 | -0.112700 | -0.126635 |
| 9 | 7 | 0 | -2.505156 | -0.675364 | 0.304936 |
| 10 | 1 | 0 | 2.476633 | -0.181435 | -0.964053 |
| 11 | 1 | 0 | 2.440589 | -1.489959 | -0.076976 |
| 12 | 8 | 0 | 1.912478 | -0.731188 | -0.388596 |

g⁻gg⁻, E = -318.3861194 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|---------------|---------------|-------------|-------------------------|---|---|
| | | | X | Y | Z |

| | | | | | |
|----|---|---|-----------|-----------|-----------|
| 1 | 6 | 0 | 1.626041 | -0.234929 | -0.170026 |
| 2 | 1 | 0 | 1.734406 | -0.339714 | -1.246180 |
| 3 | 1 | 0 | 2.572590 | -0.369786 | 0.350032 |
| 4 | 6 | 0 | 0.514127 | -1.092850 | 0.379183 |
| 5 | 1 | 0 | 0.841445 | -2.129401 | 0.278781 |
| 6 | 1 | 0 | 0.344226 | -0.893275 | 1.442160 |
| 7 | 7 | 0 | -0.718652 | -0.956089 | -0.408265 |
| 8 | 7 | 0 | -1.461805 | -0.019992 | -0.073037 |
| 9 | 7 | 0 | -2.254116 | 0.790600 | 0.134173 |
| 10 | 1 | 0 | 1.393921 | 1.555951 | 0.903192 |
| 11 | 1 | 0 | 1.606034 | 1.809142 | -0.644400 |
| 12 | 8 | 0 | 1.213548 | 1.204016 | 0.011421 |

N-(2-Azidoethyl)ethanamide

aag, E = -450.5121692 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|---------------|---------------|-------------|-------------------------|-----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | 0.129870 | 0.944573 | -0.537833 |
| 2 | 1 | 0 | -0.153334 | 1.997041 | -0.594885 |
| 3 | 1 | 0 | 0.197892 | 0.541686 | -1.550808 |
| 4 | 6 | 0 | -0.913722 | 0.164402 | 0.249464 |
| 5 | 1 | 0 | -0.623020 | -0.888773 | 0.309013 |
| 6 | 1 | 0 | -1.007002 | 0.575923 | 1.260462 |
| 7 | 7 | 0 | -2.197120 | 0.299911 | -0.479473 |
| 8 | 7 | 0 | -3.176767 | -0.191411 | 0.090406 |
| 9 | 7 | 0 | -4.165737 | -0.607648 | 0.517347 |
| 10 | 7 | 0 | 1.431139 | 0.852656 | 0.092520 |
| 11 | 1 | 0 | 1.735619 | 1.595796 | 0.702842 |
| 12 | 6 | 0 | 2.222879 | -0.242067 | -0.061718 |
| 13 | 6 | 0 | 3.544249 | -0.208830 | 0.669786 |
| 14 | 1 | 0 | 3.693560 | 0.707731 | 1.242490 |
| 15 | 1 | 0 | 3.590380 | -1.066796 | 1.343617 |
| 16 | 1 | 0 | 4.348049 | -0.311393 | -0.062127 |
| 17 | 8 | 0 | 1.884700 | -1.196780 | -0.764298 |

gag, E = -450.5129271 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|---------------|---------------|-------------|-------------------------|-----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | 0.100774 | -0.751188 | -0.678938 |
| 2 | 1 | 0 | 0.362923 | -1.584618 | -1.333356 |
| 3 | 1 | 0 | 0.350260 | 0.184583 | -1.186873 |
| 4 | 6 | 0 | 0.877928 | -0.851793 | 0.633713 |
| 5 | 1 | 0 | 0.577080 | -0.045997 | 1.310388 |
| 6 | 1 | 0 | 0.689016 | -1.811860 | 1.113854 |
| 7 | 7 | 0 | 2.338137 | -0.806394 | 0.393643 |
| 8 | 7 | 0 | 2.773856 | 0.294166 | 0.031990 |
| 9 | 7 | 0 | 3.314979 | 1.259832 | -0.298089 |
| 10 | 7 | 0 | -1.328277 | -0.776287 | -0.442713 |
| 11 | 1 | 0 | -1.827961 | -1.648409 | -0.529200 |

| | | | | | |
|----|---|---|-----------|-----------|-----------|
| 12 | 6 | 0 | -1.994263 | 0.333297 | -0.024129 |
| 13 | 6 | 0 | -3.475654 | 0.164363 | 0.216395 |
| 14 | 1 | 0 | -3.827900 | -0.849474 | 0.020746 |
| 15 | 1 | 0 | -3.691575 | 0.427263 | 1.253972 |
| 16 | 1 | 0 | -4.013289 | 0.863468 | -0.427393 |
| 17 | 8 | 0 | -1.420266 | 1.412220 | 0.137724 |

gag⁻, E = -450.5124298 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|------------------|------------------|----------------|-------------------------|-----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | -0.162369 | -0.352279 | -0.513526 |
| 2 | 1 | 0 | -0.079691 | 0.317241 | -1.372478 |
| 3 | 1 | 0 | -0.738289 | -1.232375 | -0.810190 |
| 4 | 6 | 0 | -0.857920 | 0.381829 | 0.632777 |
| 5 | 1 | 0 | -0.954852 | -0.274812 | 1.504550 |
| 6 | 1 | 0 | -0.282123 | 1.263268 | 0.910558 |
| 7 | 7 | 0 | -2.186722 | 0.885671 | 0.218356 |
| 8 | 7 | 0 | -3.043783 | 0.014818 | 0.025352 |
| 9 | 7 | 0 | -3.938736 | -0.687182 | -0.177846 |
| 10 | 7 | 0 | 1.163612 | -0.788771 | -0.126390 |
| 11 | 1 | 0 | 1.292922 | -1.729789 | 0.213302 |
| 12 | 6 | 0 | 2.216444 | 0.072449 | -0.105782 |
| 13 | 6 | 0 | 3.533470 | -0.506675 | 0.354538 |
| 14 | 1 | 0 | 3.468905 | -1.564423 | 0.614111 |
| 15 | 1 | 0 | 4.267220 | -0.375654 | -0.443414 |
| 16 | 1 | 0 | 3.876574 | 0.057916 | 1.223972 |
| 17 | 8 | 0 | 2.101374 | 1.249366 | -0.453094 |

agg, E = -450.5144087 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|------------------|------------------|----------------|-------------------------|-----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | 0.231273 | -1.454260 | -0.442835 |
| 2 | 1 | 0 | -0.084583 | -1.940365 | -1.368142 |
| 3 | 1 | 0 | 0.778300 | -2.178307 | 0.164672 |
| 4 | 6 | 0 | -0.982003 | -0.979763 | 0.338374 |
| 5 | 1 | 0 | -1.632137 | -1.829211 | 0.575624 |
| 6 | 1 | 0 | -0.662479 | -0.494755 | 1.266076 |
| 7 | 7 | 0 | -1.703644 | -0.009163 | -0.520196 |
| 8 | 7 | 0 | -2.691048 | 0.520026 | 0.000096 |
| 9 | 7 | 0 | -3.628987 | 1.082624 | 0.371096 |
| 10 | 7 | 0 | 1.124300 | -0.364691 | -0.781409 |
| 11 | 1 | 0 | 0.949411 | 0.150029 | -1.631494 |
| 12 | 6 | 0 | 1.956822 | 0.181093 | 0.145215 |
| 13 | 6 | 0 | 2.712073 | 1.413368 | -0.294263 |
| 14 | 1 | 0 | 2.593386 | 1.629024 | -1.357252 |
| 15 | 1 | 0 | 2.350569 | 2.265638 | 0.286354 |
| 16 | 1 | 0 | 3.770545 | 1.274907 | -0.067280 |
| 17 | 8 | 0 | 2.090456 | -0.305144 | 1.270674 |

agg⁻, E = -450.5127234 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|------------------|------------------|----------------|-------------------------|-----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | 0.228111 | 1.571634 | 0.154075 |
| 2 | 1 | 0 | 0.364205 | 1.461829 | 1.230459 |
| 3 | 1 | 0 | 0.399115 | 2.617909 | -0.116054 |
| 4 | 6 | 0 | -1.191625 | 1.193925 | -0.231797 |
| 5 | 1 | 0 | -1.900230 | 1.844085 | 0.293747 |
| 6 | 1 | 0 | -1.338860 | 1.306094 | -1.312499 |
| 7 | 7 | 0 | -1.403358 | -0.219773 | 0.154933 |
| 8 | 7 | 0 | -2.556911 | -0.634175 | 0.006427 |
| 9 | 7 | 0 | -3.591340 | -1.139236 | -0.090395 |
| 10 | 7 | 0 | 1.208471 | 0.728246 | -0.495383 |
| 11 | 1 | 0 | 1.292092 | 0.776918 | -1.500580 |
| 12 | 6 | 0 | 1.891808 | -0.252665 | 0.156978 |
| 13 | 6 | 0 | 2.762692 | -1.122335 | -0.720991 |
| 14 | 1 | 0 | 2.873819 | -0.732555 | -1.734107 |
| 15 | 1 | 0 | 3.745816 | -1.217002 | -0.257321 |
| 16 | 1 | 0 | 2.314015 | -2.117742 | -0.769844 |
| 17 | 8 | 0 | 1.813259 | -0.428541 | 1.373441 |

ggg, E = -450.5140946 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|------------------|------------------|----------------|-------------------------|-----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | -0.143988 | 0.746113 | 0.910327 |
| 2 | 1 | 0 | -0.834591 | 0.413217 | 1.689688 |
| 3 | 1 | 0 | 0.389598 | 1.625415 | 1.280263 |
| 4 | 6 | 0 | -0.907022 | 1.138302 | -0.350650 |
| 5 | 1 | 0 | -1.588983 | 1.968520 | -0.134727 |
| 6 | 1 | 0 | -0.211281 | 1.441607 | -1.131127 |
| 7 | 7 | 0 | -1.659834 | -0.006942 | -0.916848 |
| 8 | 7 | 0 | -2.609342 | -0.404340 | -0.232140 |
| 9 | 7 | 0 | -3.521843 | -0.869719 | 0.303309 |
| 10 | 7 | 0 | 0.813163 | -0.314976 | 0.671591 |
| 11 | 1 | 0 | 0.525713 | -1.271990 | 0.810072 |
| 12 | 6 | 0 | 1.989572 | -0.072596 | 0.034215 |
| 13 | 6 | 0 | 2.838412 | -1.285315 | -0.266312 |
| 14 | 1 | 0 | 2.459454 | -2.196299 | 0.199422 |
| 15 | 1 | 0 | 2.871062 | -1.424606 | -1.349665 |
| 16 | 1 | 0 | 3.855469 | -1.095271 | 0.080713 |
| 17 | 8 | 0 | 2.339588 | 1.069027 | -0.273938 |

ggg-, E = -450.5147428 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|------------------|------------------|----------------|-------------------------|----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | 0.139357 | 1.376725 | -0.773022 |
| 2 | 1 | 0 | 0.382416 | 0.643469 | -1.544991 |
| 3 | 1 | 0 | 0.023277 | 2.353392 | -1.251668 |
| 4 | 6 | 0 | 1.267876 | 1.461369 | 0.250964 |
| 5 | 1 | 0 | 2.193031 | 1.782811 | -0.242000 |
| 6 | 1 | 0 | 1.019261 | 2.179139 | 1.033311 |

| | | | | | |
|----|---|---|-----------|-----------|-----------|
| 7 | 7 | 0 | 1.478387 | 0.177719 | 0.956118 |
| 8 | 7 | 0 | 1.928781 | -0.735883 | 0.254721 |
| 9 | 7 | 0 | 2.353721 | -1.667371 | -0.279087 |
| 10 | 7 | 0 | -1.118356 | 0.982620 | -0.175484 |
| 11 | 1 | 0 | -1.636996 | 1.667445 | 0.354611 |
| 12 | 6 | 0 | -1.540513 | -0.311440 | -0.152254 |
| 13 | 6 | 0 | -2.813491 | -0.565295 | 0.621451 |
| 14 | 1 | 0 | -3.330449 | 0.352300 | 0.906917 |
| 15 | 1 | 0 | -3.476092 | -1.183187 | 0.013369 |
| 16 | 1 | 0 | -2.560876 | -1.126936 | 1.524350 |
| 17 | 8 | 0 | -0.928834 | -1.217022 | -0.721326 |

g⁻gg, E = -450.5159553 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|------------------|------------------|----------------|-------------------------|-----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | 0.310342 | -1.572126 | 0.584769 |
| 2 | 1 | 0 | 0.770445 | -1.843663 | 1.536403 |
| 3 | 1 | 0 | -0.231092 | -2.438833 | 0.193549 |
| 4 | 6 | 0 | 1.392554 | -1.178270 | -0.416418 |
| 5 | 1 | 0 | 2.105460 | -1.995166 | -0.532407 |
| 6 | 1 | 0 | 0.948176 | -0.949428 | -1.389053 |
| 7 | 7 | 0 | 2.179701 | -0.021088 | 0.069120 |
| 8 | 7 | 0 | 1.646570 | 1.085202 | -0.077684 |
| 9 | 7 | 0 | 1.289057 | 2.179864 | -0.180557 |
| 10 | 7 | 0 | -0.621060 | -0.489136 | 0.835125 |
| 11 | 1 | 0 | -0.562423 | 0.019698 | 1.704444 |
| 12 | 6 | 0 | -1.550114 | -0.114225 | -0.084975 |
| 13 | 6 | 0 | -2.379674 | 1.092813 | 0.281780 |
| 14 | 1 | 0 | -2.395557 | 1.281335 | 1.356587 |
| 15 | 1 | 0 | -1.955402 | 1.966950 | -0.220846 |
| 16 | 1 | 0 | -3.397358 | 0.948526 | -0.081962 |
| 17 | 8 | 0 | -1.672597 | -0.705309 | -1.159960 |

g⁻gg⁻, E = -450.5152881 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|------------------|------------------|----------------|-------------------------|-----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | 0.642199 | -1.625759 | -0.057508 |
| 2 | 1 | 0 | 0.481025 | -1.760339 | 1.012838 |
| 3 | 1 | 0 | 0.738785 | -2.609063 | -0.528037 |
| 4 | 6 | 0 | 1.926804 | -0.836465 | -0.287077 |
| 5 | 1 | 0 | 2.778920 | -1.398365 | 0.097000 |
| 6 | 1 | 0 | 2.080846 | -0.650141 | -1.356412 |
| 7 | 7 | 0 | 1.931536 | 0.442335 | 0.453497 |
| 8 | 7 | 0 | 1.173988 | 1.324313 | 0.033096 |
| 9 | 7 | 0 | 0.551600 | 2.256281 | -0.253134 |
| 10 | 7 | 0 | -0.518177 | -0.942232 | -0.591089 |
| 11 | 1 | 0 | -0.672572 | -0.959638 | -1.588936 |
| 12 | 6 | 0 | -1.427415 | -0.293409 | 0.191391 |
| 13 | 6 | 0 | -2.528835 | 0.414435 | -0.560839 |
| 14 | 1 | 0 | -2.657357 | 0.040282 | -1.578064 |
| 15 | 1 | 0 | -3.462473 | 0.306557 | -0.007906 |

| | | | | | |
|----|---|---|-----------|-----------|-----------|
| 16 | 1 | 0 | -2.277054 | 1.478033 | -0.605839 |
| 17 | 8 | 0 | -1.332408 | -0.245627 | 1.417871 |

DMSO

1,2-Diazidoethane

aaa, E = -406.1998083 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|---------------|---------------|-------------|-------------------------|-----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | -0.397019 | 0.645456 | 0.118223 |
| 2 | 1 | 0 | -1.058887 | 0.678661 | 0.989650 |
| 3 | 1 | 0 | -0.995664 | 0.722040 | -0.794703 |
| 4 | 6 | 0 | 0.397019 | -0.645456 | 0.118223 |
| 5 | 1 | 0 | 0.995664 | -0.722040 | -0.794703 |
| 6 | 1 | 0 | 1.058887 | -0.678661 | 0.989650 |
| 7 | 7 | 0 | 0.591534 | 1.743744 | 0.188424 |
| 8 | 7 | 0 | 0.144915 | 2.869392 | -0.056660 |
| 9 | 7 | 0 | -0.144915 | 3.967551 | -0.260947 |
| 10 | 7 | 0 | -0.591534 | -1.743744 | 0.188424 |
| 11 | 7 | 0 | -0.144915 | -2.869392 | -0.056660 |
| 12 | 7 | 0 | 0.144915 | -3.967551 | -0.260947 |

aag, E = -406.2001685 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|---------------|---------------|-------------|-------------------------|-----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | -0.398810 | 0.003812 | 0.227352 |
| 2 | 1 | 0 | -0.536052 | 0.042531 | 1.312753 |
| 3 | 1 | 0 | -0.103684 | -1.010728 | -0.063588 |
| 4 | 6 | 0 | 0.657820 | 1.012248 | -0.195944 |
| 5 | 1 | 0 | 0.775995 | 1.006552 | -1.284461 |
| 6 | 1 | 0 | 0.374086 | 2.013183 | 0.126660 |
| 7 | 7 | 0 | -1.647082 | 0.382457 | -0.472944 |
| 8 | 7 | 0 | -2.666699 | -0.185193 | -0.065934 |
| 9 | 7 | 0 | -3.686619 | -0.644621 | 0.217623 |
| 10 | 7 | 0 | 1.945077 | 0.724686 | 0.470493 |
| 11 | 7 | 0 | 2.544896 | -0.274783 | 0.053438 |
| 12 | 7 | 0 | 3.215512 | -1.166531 | -0.242648 |

gag, E = -406.200656 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|---------------|---------------|-------------|-------------------------|-----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | -0.750584 | 0.139708 | -0.702491 |
| 2 | 1 | 0 | -1.028264 | 0.686138 | -1.603127 |
| 3 | 1 | 0 | -1.037248 | 0.730491 | 0.174865 |
| 4 | 6 | 0 | 0.750584 | -0.139708 | -0.702491 |
| 5 | 1 | 0 | 1.037248 | -0.730491 | 0.174865 |
| 6 | 1 | 0 | 1.028264 | -0.686138 | -1.603127 |

| | | | | | |
|----|---|---|-----------|-----------|-----------|
| 7 | 7 | 0 | -1.517379 | -1.123984 | -0.741026 |
| 8 | 7 | 0 | -1.517379 | -1.770474 | 0.315090 |
| 9 | 7 | 0 | -1.613746 | -2.465121 | 1.232108 |
| 10 | 7 | 0 | 1.517379 | 1.123984 | -0.741026 |
| 11 | 7 | 0 | 1.517379 | 1.770474 | 0.315090 |
| 12 | 7 | 0 | 1.613746 | 2.465121 | 1.232108 |

gag, E = -406.200527 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|------------------|------------------|----------------|-------------------------|-----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | 0.365890 | -0.615068 | 0.265311 |
| 2 | 1 | 0 | 0.365962 | -0.621543 | 1.355825 |
| 3 | 1 | 0 | 1.401265 | -0.622543 | -0.090349 |
| 4 | 6 | 0 | -0.365890 | 0.615068 | -0.265311 |
| 5 | 1 | 0 | -0.365962 | 0.621543 | -1.355825 |
| 6 | 1 | 0 | -1.401265 | 0.622543 | 0.090349 |
| 7 | 7 | 0 | -0.335938 | -1.853402 | -0.135080 |
| 8 | 7 | 0 | -0.247843 | -2.143881 | -1.335398 |
| 9 | 7 | 0 | -0.238338 | -2.540005 | -2.419694 |
| 10 | 7 | 0 | 0.335938 | 1.853402 | 0.135080 |
| 11 | 7 | 0 | 0.247843 | 2.143881 | 1.335398 |
| 12 | 7 | 0 | 0.238338 | 2.540005 | 2.419694 |

aga, E = -406.2020134 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|------------------|------------------|----------------|-------------------------|-----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | -0.319365 | -0.683386 | 0.980156 |
| 2 | 1 | 0 | -0.039522 | -1.209715 | 1.898807 |
| 3 | 1 | 0 | -1.409442 | -0.589480 | 0.934032 |
| 4 | 6 | 0 | 0.319365 | 0.683386 | 0.980156 |
| 5 | 1 | 0 | 0.039522 | 1.209715 | 1.898807 |
| 6 | 1 | 0 | 1.409442 | 0.589480 | 0.934032 |
| 7 | 7 | 0 | -0.183842 | 1.419322 | -0.201262 |
| 8 | 7 | 0 | 0.319365 | 2.533048 | -0.380998 |
| 9 | 7 | 0 | 0.183842 | -1.419322 | -0.201262 |
| 10 | 7 | 0 | -0.319365 | -2.533048 | -0.380998 |
| 11 | 7 | 0 | 0.710947 | 3.582076 | -0.662565 |
| 12 | 7 | 0 | -0.710947 | -3.582076 | -0.662565 |

agg, E = -406.2020886 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|------------------|------------------|----------------|-------------------------|-----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | -0.886729 | 1.388764 | 0.083279 |
| 2 | 1 | 0 | -1.529893 | 1.758235 | 0.889216 |
| 3 | 1 | 0 | -0.666863 | 2.209341 | -0.598989 |
| 4 | 6 | 0 | 0.395338 | 0.842173 | 0.678791 |
| 5 | 1 | 0 | 0.868765 | 1.619955 | 1.287849 |
| 6 | 1 | 0 | 0.185853 | -0.023366 | 1.318244 |
| 7 | 7 | 0 | 1.287334 | 0.456627 | -0.436347 |

| | | | | | |
|----|---|---|-----------|-----------|-----------|
| 8 | 7 | 0 | 2.205231 | -0.313775 | -0.135662 |
| 9 | 7 | 0 | -1.608809 | 0.385394 | -0.730265 |
| 10 | 7 | 0 | -1.993840 | -0.614798 | -0.113402 |
| 11 | 7 | 0 | 3.102005 | -1.024828 | 0.013650 |
| 12 | 7 | 0 | -2.407565 | -1.595731 | 0.335064 |

agg⁻, E = -406.2034749 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|------------------|------------------|----------------|-------------------------|-----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | 1.001993 | 1.396135 | 0.262700 |
| 2 | 1 | 0 | 1.364282 | 2.384921 | -0.018778 |
| 3 | 1 | 0 | 1.147077 | 1.256951 | 1.339109 |
| 4 | 6 | 0 | -0.466887 | 1.283776 | -0.089541 |
| 5 | 1 | 0 | -1.027350 | 2.070997 | 0.427164 |
| 6 | 1 | 0 | -0.603419 | 1.385116 | -1.171015 |
| 7 | 7 | 0 | -0.923929 | -0.050954 | 0.360213 |
| 8 | 7 | 0 | -2.075808 | -0.354863 | 0.034770 |
| 9 | 7 | 0 | 1.827389 | 0.435401 | -0.498457 |
| 10 | 7 | 0 | 1.806642 | -0.734791 | -0.096200 |
| 11 | 7 | 0 | -3.132210 | -0.753437 | -0.204867 |
| 12 | 7 | 0 | 1.913456 | -1.852422 | 0.173764 |

ggg, E = -406.2022304 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|------------------|------------------|----------------|-------------------------|-----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | -0.709997 | -0.275023 | 1.033179 |
| 2 | 1 | 0 | -0.852167 | -0.897218 | 1.923903 |
| 3 | 1 | 0 | -1.442379 | 0.532831 | 1.055817 |
| 4 | 6 | 0 | 0.709997 | 0.275023 | 1.033179 |
| 5 | 1 | 0 | 0.852167 | 0.897218 | 1.923903 |
| 6 | 1 | 0 | 1.442379 | -0.532831 | 1.055817 |
| 7 | 7 | 0 | 1.021140 | 1.042771 | -0.191676 |
| 8 | 7 | 0 | 0.297692 | 2.023490 | -0.401470 |
| 9 | 7 | 0 | -1.021140 | -1.042771 | -0.191676 |
| 10 | 7 | 0 | -0.297692 | -2.023490 | -0.401470 |
| 11 | 7 | 0 | -0.297692 | 2.961264 | -0.718110 |
| 12 | 7 | 0 | 0.297692 | -2.961264 | -0.718110 |

g⁻gg⁻, E = -406.2036376 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|------------------|------------------|----------------|-------------------------|-----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | 1.358915 | 1.166081 | 0.054856 |
| 2 | 1 | 0 | 2.024869 | 1.861853 | -0.456878 |
| 3 | 1 | 0 | 1.648858 | 1.100737 | 1.108374 |
| 4 | 6 | 0 | -0.075120 | 1.660652 | -0.068232 |
| 5 | 1 | 0 | -0.151705 | 2.654059 | 0.378079 |
| 6 | 1 | 0 | -0.368414 | 1.714932 | -1.120487 |
| 7 | 7 | 0 | -0.989951 | 0.776695 | 0.689319 |
| 8 | 7 | 0 | -1.651499 | -0.023775 | 0.017928 |

| | | | | | |
|----|---|---|-----------|-----------|-----------|
| 9 | 7 | 0 | 1.547425 | -0.136892 | -0.614421 |
| 10 | 7 | 0 | 1.098692 | -1.124101 | -0.016819 |
| 11 | 7 | 0 | -2.320713 | -0.823633 | -0.477246 |
| 12 | 7 | 0 | 0.765135 | -2.138576 | 0.425691 |

ggg, E = -406.2037057 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|------------------|------------------|----------------|-------------------------|-----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | -0.446056 | 1.490206 | -0.382137 |
| 2 | 1 | 0 | -1.230602 | 2.132936 | 0.032802 |
| 3 | 1 | 0 | -0.019668 | 1.966284 | -1.264277 |
| 4 | 6 | 0 | 0.637135 | 1.262829 | 0.662860 |
| 5 | 1 | 0 | 1.047975 | 2.224924 | 0.970839 |
| 6 | 1 | 0 | 0.229608 | 0.760118 | 1.547984 |
| 7 | 7 | 0 | 1.773792 | 0.494137 | 0.116273 |
| 8 | 7 | 0 | 1.577969 | -0.717771 | -0.041247 |
| 9 | 7 | 0 | -1.019273 | 0.213643 | -0.865342 |
| 10 | 7 | 0 | -1.699141 | -0.409954 | -0.040680 |
| 11 | 7 | 0 | 1.556084 | -1.859842 | -0.213691 |
| 12 | 7 | 0 | -2.357115 | -1.091996 | 0.620160 |

2-Azidoethanamine

aaa, E = -298.1505049 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|------------------|------------------|----------------|-------------------------|-----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | -1.497112 | 0.746589 | 0.000000 |
| 2 | 1 | 0 | -1.945582 | 0.282881 | 0.882783 |
| 3 | 1 | 0 | -1.945582 | 0.282881 | -0.882783 |
| 4 | 6 | 0 | 0.000000 | 0.463228 | 0.000000 |
| 5 | 1 | 0 | 0.468040 | 0.894980 | -0.892214 |
| 6 | 1 | 0 | 0.468040 | 0.894980 | 0.892214 |
| 7 | 7 | 0 | 0.182133 | -1.011090 | 0.000000 |
| 8 | 7 | 0 | 1.354338 | -1.397524 | 0.000000 |
| 9 | 7 | 0 | 2.402595 | -1.883262 | 0.000000 |
| 10 | 7 | 0 | -1.826918 | 2.169118 | 0.000000 |
| 11 | 1 | 0 | -1.423641 | 2.622342 | 0.814606 |
| 12 | 1 | 0 | -1.423641 | 2.622342 | -0.814606 |

aag, E = -298.1499706 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|------------------|------------------|----------------|-------------------------|-----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | 1.579492 | 0.494280 | -0.044383 |
| 2 | 1 | 0 | 1.585705 | 1.182899 | 0.810774 |
| 3 | 1 | 0 | 1.563214 | 1.093349 | -0.958160 |
| 4 | 6 | 0 | 0.317355 | -0.346765 | 0.018820 |
| 5 | 1 | 0 | 0.223506 | -0.953574 | -0.887409 |
| 6 | 1 | 0 | 0.345556 | -1.010392 | 0.890935 |
| 7 | 7 | 0 | -0.835993 | 0.579343 | 0.140136 |

| | | | | | |
|----|---|---|-----------|-----------|-----------|
| 8 | 7 | 0 | -1.946302 | 0.056148 | 0.010140 |
| 9 | 7 | 0 | -3.036957 | -0.310951 | -0.089950 |
| 10 | 7 | 0 | 2.739639 | -0.397674 | -0.093703 |
| 11 | 1 | 0 | 3.577749 | 0.141992 | -0.285086 |
| 12 | 1 | 0 | 2.880478 | -0.827418 | 0.815962 |

gaa, E = -298.1510172 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|------------------|------------------|----------------|-------------------------|-----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | 1.196792 | -0.351941 | -0.384621 |
| 2 | 1 | 0 | 1.212649 | -0.176292 | -1.463676 |
| 3 | 1 | 0 | 0.678154 | -1.300648 | -0.213478 |
| 4 | 6 | 0 | 0.414317 | 0.778566 | 0.285048 |
| 5 | 1 | 0 | 0.365487 | 0.621857 | 1.369073 |
| 6 | 1 | 0 | 0.891966 | 1.739941 | 0.092044 |
| 7 | 7 | 0 | -0.956466 | 0.903257 | -0.270084 |
| 8 | 7 | 0 | -1.718504 | -0.035026 | -0.012733 |
| 9 | 7 | 0 | -2.535061 | -0.834540 | 0.160267 |
| 10 | 7 | 0 | 2.570817 | -0.486666 | 0.091737 |
| 11 | 1 | 0 | 3.080194 | 0.378109 | -0.064795 |
| 12 | 1 | 0 | 2.579405 | -0.651891 | 1.093954 |

gag, E = -298.1503717 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|------------------|------------------|----------------|-------------------------|-----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | -1.186036 | -0.369651 | 0.326659 |
| 2 | 1 | 0 | -1.158861 | -0.279892 | 1.420579 |
| 3 | 1 | 0 | -0.698781 | -1.311582 | 0.056811 |
| 4 | 6 | 0 | -0.403865 | 0.790628 | -0.275534 |
| 5 | 1 | 0 | -0.345375 | 0.686291 | -1.363947 |
| 6 | 1 | 0 | -0.884886 | 1.740731 | -0.039464 |
| 7 | 7 | 0 | 0.958320 | 0.891703 | 0.302710 |
| 8 | 7 | 0 | 1.719784 | -0.039905 | 0.020252 |
| 9 | 7 | 0 | 2.534345 | -0.837151 | -0.170042 |
| 10 | 7 | 0 | -2.538121 | -0.376231 | -0.235778 |
| 11 | 1 | 0 | -3.020474 | -1.224651 | 0.044088 |
| 12 | 1 | 0 | -3.072514 | 0.394331 | 0.155195 |

gag⁻, E = -298.1503318 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|------------------|------------------|----------------|-------------------------|-----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | 1.205538 | -0.305475 | -0.393276 |
| 2 | 1 | 0 | 1.269345 | -0.095697 | -1.463953 |
| 3 | 1 | 0 | 0.674500 | -1.260044 | -0.270199 |
| 4 | 6 | 0 | 0.402087 | 0.803218 | 0.274217 |
| 5 | 1 | 0 | 0.354540 | 0.646322 | 1.358332 |
| 6 | 1 | 0 | 0.862347 | 1.771344 | 0.080608 |
| 7 | 7 | 0 | -0.970201 | 0.894562 | -0.279869 |
| 8 | 7 | 0 | -1.714082 | -0.055705 | -0.013053 |

| | | | | | |
|----|---|---|-----------|-----------|-----------|
| 9 | 7 | 0 | -2.516371 | -0.867465 | 0.168055 |
| 10 | 7 | 0 | 2.559207 | -0.316173 | 0.164624 |
| 11 | 1 | 0 | 2.537598 | -0.691955 | 1.108304 |
| 12 | 1 | 0 | 3.146057 | -0.942966 | -0.377036 |

aga, E = -298.1520752 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|------------------|------------------|----------------|-------------------------|-----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | -1.758876 | 0.476476 | -0.155329 |
| 2 | 1 | 0 | -1.853232 | 0.680171 | -1.226031 |
| 3 | 1 | 0 | -2.441099 | 1.151363 | 0.369462 |
| 4 | 6 | 0 | -0.340408 | 0.810338 | 0.281344 |
| 5 | 1 | 0 | -0.118667 | 1.868579 | 0.103063 |
| 6 | 1 | 0 | -0.209774 | 0.588928 | 1.346891 |
| 7 | 7 | 0 | 0.583472 | -0.031035 | -0.523002 |
| 8 | 7 | 0 | 1.733978 | -0.124018 | -0.086832 |
| 9 | 7 | 0 | 2.837122 | -0.283886 | 0.216079 |
| 10 | 7 | 0 | -2.174421 | -0.901300 | 0.094551 |
| 11 | 1 | 0 | -1.511545 | -1.533056 | -0.346423 |
| 12 | 1 | 0 | -2.131036 | -1.095198 | 1.091383 |

agg, E = -298.1519595 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|------------------|------------------|----------------|-------------------------|-----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | 1.744344 | 0.489779 | 0.173890 |
| 2 | 1 | 0 | 1.827874 | 0.631554 | 1.260185 |
| 3 | 1 | 0 | 2.410976 | 1.209032 | -0.309903 |
| 4 | 6 | 0 | 0.327616 | 0.812422 | -0.248465 |
| 5 | 1 | 0 | 0.070662 | 1.842931 | 0.017679 |
| 6 | 1 | 0 | 0.218198 | 0.671958 | -1.329053 |
| 7 | 7 | 0 | -0.575685 | -0.124368 | 0.472061 |
| 8 | 7 | 0 | -1.745275 | -0.140410 | 0.079069 |
| 9 | 7 | 0 | -2.862198 | -0.245998 | -0.196023 |
| 10 | 7 | 0 | 2.105162 | -0.857343 | -0.270791 |
| 11 | 1 | 0 | 3.063062 | -1.059987 | -0.000238 |
| 12 | 1 | 0 | 1.523438 | -1.531866 | 0.218561 |

agg⁻, E = -298.1500388 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|------------------|------------------|----------------|-------------------------|-----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | -1.728740 | 0.495806 | -0.161526 |
| 2 | 1 | 0 | -1.772782 | 0.686202 | -1.237251 |
| 3 | 1 | 0 | -2.372420 | 1.235498 | 0.334281 |
| 4 | 6 | 0 | -0.313130 | 0.740879 | 0.319962 |
| 5 | 1 | 0 | -0.073139 | 1.807221 | 0.250949 |
| 6 | 1 | 0 | -0.209226 | 0.423727 | 1.364502 |
| 7 | 7 | 0 | 0.625027 | -0.027633 | -0.536022 |
| 8 | 7 | 0 | 1.772844 | -0.134204 | -0.097230 |
| 9 | 7 | 0 | 2.875693 | -0.304365 | 0.202934 |

| | | | | | |
|----|---|---|-----------|-----------|-----------|
| 10 | 7 | 0 | -2.134279 | -0.888741 | 0.085146 |
| 11 | 1 | 0 | -2.250906 | -1.032880 | 1.084540 |
| 12 | 1 | 0 | -3.045303 | -1.055273 | -0.331429 |

gga, E = -298.1521611 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|------------------|------------------|----------------|-------------------------|-----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | 1.318153 | -0.042831 | 0.679156 |
| 2 | 1 | 0 | 0.708020 | -0.686353 | 1.322003 |
| 3 | 1 | 0 | 2.080517 | 0.416087 | 1.316294 |
| 4 | 6 | 0 | 0.445733 | 1.073931 | 0.112805 |
| 5 | 1 | 0 | 0.027654 | 1.686861 | 0.919929 |
| 6 | 1 | 0 | 1.026419 | 1.713646 | -0.553049 |
| 7 | 7 | 0 | -0.653400 | 0.537330 | -0.732477 |
| 8 | 7 | 0 | -1.528642 | -0.085054 | -0.121236 |
| 9 | 7 | 0 | -2.414112 | -0.678099 | 0.326222 |
| 10 | 7 | 0 | 1.981326 | -0.879711 | -0.317622 |
| 11 | 1 | 0 | 1.287659 | -1.273178 | -0.947384 |
| 12 | 1 | 0 | 2.590211 | -0.304925 | -0.893773 |

ggg, E = -298.1520207 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|------------------|------------------|----------------|-------------------------|-----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | 1.324292 | -0.006375 | 0.660671 |
| 2 | 1 | 0 | 0.724766 | -0.647524 | 1.323921 |
| 3 | 1 | 0 | 2.096613 | 0.466976 | 1.274109 |
| 4 | 6 | 0 | 0.436711 | 1.090093 | 0.099483 |
| 5 | 1 | 0 | 0.014877 | 1.698099 | 0.906720 |
| 6 | 1 | 0 | 1.005486 | 1.729637 | -0.575041 |
| 7 | 7 | 0 | -0.662184 | 0.531035 | -0.734154 |
| 8 | 7 | 0 | -1.522162 | -0.100193 | -0.110054 |
| 9 | 7 | 0 | -2.393688 | -0.703781 | 0.350206 |
| 10 | 7 | 0 | 1.973074 | -0.737378 | -0.428774 |
| 11 | 1 | 0 | 2.561117 | -1.470736 | -0.043743 |
| 12 | 1 | 0 | 1.265847 | -1.206543 | -0.987458 |

ggg⁻, E = -298.1508925 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|------------------|------------------|----------------|-------------------------|-----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | 1.279375 | -0.061800 | 0.638728 |
| 2 | 1 | 0 | 0.664679 | -0.661312 | 1.317972 |
| 3 | 1 | 0 | 2.120242 | 0.332694 | 1.226576 |
| 4 | 6 | 0 | 0.479509 | 1.137225 | 0.155057 |
| 5 | 1 | 0 | 0.181212 | 1.751899 | 1.011333 |
| 6 | 1 | 0 | 1.073939 | 1.752777 | -0.521651 |
| 7 | 7 | 0 | -0.725872 | 0.765513 | -0.628409 |
| 8 | 7 | 0 | -1.461391 | -0.073881 | -0.103585 |
| 9 | 7 | 0 | -2.228046 | -0.853708 | 0.271702 |
| 10 | 7 | 0 | 1.683716 | -0.911639 | -0.481005 |

| | | | | | |
|----|---|---|----------|-----------|-----------|
| 11 | 1 | 0 | 2.327419 | -0.400487 | -1.078890 |
| 12 | 1 | 0 | 2.200360 | -1.712115 | -0.128977 |

g⁻ga, E = -298.1515146 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|------------------|------------------|----------------|-------------------------|-----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | 1.686123 | -0.129234 | -0.120367 |
| 2 | 1 | 0 | 1.913813 | -0.375549 | -1.161016 |
| 3 | 1 | 0 | 2.577465 | -0.354101 | 0.474785 |
| 4 | 6 | 0 | 0.568648 | -1.047698 | 0.369814 |
| 5 | 1 | 0 | 0.869974 | -2.091728 | 0.266614 |
| 6 | 1 | 0 | 0.339528 | -0.849515 | 1.423240 |
| 7 | 7 | 0 | -0.661680 | -0.901814 | -0.448110 |
| 8 | 7 | 0 | -1.456620 | -0.031773 | -0.078071 |
| 9 | 7 | 0 | -2.298523 | 0.718587 | 0.174991 |
| 10 | 7 | 0 | 1.414229 | 1.301991 | -0.038771 |
| 11 | 1 | 0 | 0.664075 | 1.562459 | -0.670331 |
| 12 | 1 | 0 | 1.124682 | 1.561086 | 0.899756 |

g⁻gg, E = -298.1515858 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|------------------|------------------|----------------|-------------------------|-----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | 1.671843 | -0.124415 | -0.098542 |
| 2 | 1 | 0 | 1.957765 | -0.365052 | -1.130478 |
| 3 | 1 | 0 | 2.541809 | -0.301771 | 0.540757 |
| 4 | 6 | 0 | 0.574926 | -1.077721 | 0.345783 |
| 5 | 1 | 0 | 0.881010 | -2.112484 | 0.186196 |
| 6 | 1 | 0 | 0.346501 | -0.928365 | 1.406119 |
| 7 | 7 | 0 | -0.656814 | -0.896747 | -0.464463 |
| 8 | 7 | 0 | -1.439936 | -0.026536 | -0.070157 |
| 9 | 7 | 0 | -2.272105 | 0.728853 | 0.198788 |
| 10 | 7 | 0 | 1.235627 | 1.264335 | 0.072995 |
| 11 | 1 | 0 | 2.044071 | 1.878033 | 0.081247 |
| 12 | 1 | 0 | 0.680831 | 1.553122 | -0.727424 |

g⁻gg⁻, E = -298.1523262 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|------------------|------------------|----------------|-------------------------|-----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | 1.619902 | -0.116340 | -0.210454 |
| 2 | 1 | 0 | 1.688531 | -0.280182 | -1.288971 |
| 3 | 1 | 0 | 2.594433 | -0.367290 | 0.232473 |
| 4 | 6 | 0 | 0.590597 | -1.076832 | 0.362626 |
| 5 | 1 | 0 | 0.922816 | -2.106826 | 0.229857 |
| 6 | 1 | 0 | 0.447260 | -0.894042 | 1.434557 |
| 7 | 7 | 0 | -0.709257 | -0.990683 | -0.340162 |
| 8 | 7 | 0 | -1.423409 | -0.019871 | -0.071091 |
| 9 | 7 | 0 | -2.217224 | 0.802513 | 0.098974 |
| 10 | 7 | 0 | 1.201528 | 1.266443 | 0.021853 |
| 11 | 1 | 0 | 1.318062 | 1.497884 | 1.004744 |

12 1 0 1.804441 1.900669 -0.492709

2-Azidoethylammonium ion

aa, E = -298.5975656 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|---------------|---------------|-------------|-------------------------|-----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | 1.479848 | 0.533672 | -0.048601 |
| 2 | 1 | 0 | 1.544728 | 1.231815 | 0.784550 |
| 3 | 1 | 0 | 1.482745 | 1.079954 | -0.990256 |
| 4 | 6 | 0 | 0.247909 | -0.345555 | 0.069243 |
| 5 | 1 | 0 | 0.184702 | -1.032722 | -0.781449 |
| 6 | 1 | 0 | 0.270736 | -0.923294 | 0.999784 |
| 7 | 7 | 0 | -0.893123 | 0.588367 | 0.072141 |
| 8 | 7 | 0 | -2.004695 | 0.048445 | -0.001588 |
| 9 | 7 | 0 | -3.094369 | -0.321278 | -0.064691 |
| 10 | 7 | 0 | 2.715423 | -0.306920 | -0.019556 |
| 11 | 1 | 0 | 2.808903 | -0.817765 | 0.861501 |
| 12 | 1 | 0 | 2.724196 | -0.995014 | -0.776295 |
| 13 | 1 | 0 | 3.554788 | 0.268029 | -0.125834 |

ag, E = -298.5974339 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|---------------|---------------|-------------|-------------------------|-----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | 1.149794 | -0.311983 | -0.404076 |
| 2 | 1 | 0 | 1.232310 | -0.094664 | -1.467893 |
| 3 | 1 | 0 | 0.728216 | -1.307002 | -0.264482 |
| 4 | 6 | 0 | 0.320748 | 0.753817 | 0.303659 |
| 5 | 1 | 0 | 0.229744 | 0.535486 | 1.372957 |
| 6 | 1 | 0 | 0.775781 | 1.736942 | 0.181526 |
| 7 | 7 | 0 | -1.005702 | 0.847832 | -0.329882 |
| 8 | 7 | 0 | -1.804310 | -0.048914 | -0.018082 |
| 9 | 7 | 0 | -2.652876 | -0.801610 | 0.187402 |
| 10 | 7 | 0 | 2.539811 | -0.346655 | 0.149948 |
| 11 | 1 | 0 | 3.026102 | 0.542630 | 0.009061 |
| 12 | 1 | 0 | 2.547288 | -0.548129 | 1.153023 |
| 13 | 1 | 0 | 3.098839 | -1.070845 | -0.307391 |

ga, E = -298.6022925 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|---------------|---------------|-------------|-------------------------|-----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | -1.682447 | 0.582742 | -0.197037 |
| 2 | 1 | 0 | -1.780118 | 0.684960 | -1.276811 |
| 3 | 1 | 0 | -2.388976 | 1.242682 | 0.303676 |
| 4 | 6 | 0 | -0.265093 | 0.856834 | 0.253787 |
| 5 | 1 | 0 | 0.013732 | 1.867751 | -0.057187 |
| 6 | 1 | 0 | -0.178980 | 0.779533 | 1.343070 |
| 7 | 7 | 0 | 0.580610 | -0.158750 | -0.409441 |
| 8 | 7 | 0 | 1.772032 | -0.152655 | -0.073603 |

| | | | | | |
|----|---|---|-----------|-----------|-----------|
| 9 | 7 | 0 | 2.897711 | -0.245746 | 0.152062 |
| 10 | 7 | 0 | -2.048405 | -0.826146 | 0.141713 |
| 11 | 1 | 0 | -1.350456 | -1.469781 | -0.244273 |
| 12 | 1 | 0 | -2.080632 | -0.977323 | 1.152610 |
| 13 | 1 | 0 | -2.962959 | -1.082206 | -0.236699 |

gg, E = -298.6013585 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|------------------|------------------|----------------|-------------------------|-----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | 1.302012 | 0.156151 | 0.718296 |
| 2 | 1 | 0 | 0.779983 | -0.470499 | 1.441148 |
| 3 | 1 | 0 | 2.090218 | 0.714400 | 1.222530 |
| 4 | 6 | 0 | 0.347045 | 1.087752 | -0.008123 |
| 5 | 1 | 0 | -0.127701 | 1.750106 | 0.720935 |
| 6 | 1 | 0 | 0.877898 | 1.698112 | -0.739431 |
| 7 | 7 | 0 | -0.653529 | 0.316343 | -0.777649 |
| 8 | 7 | 0 | -1.598258 | -0.130981 | -0.108062 |
| 9 | 7 | 0 | -2.533896 | -0.589804 | 0.384233 |
| 10 | 7 | 0 | 1.951612 | -0.763722 | -0.265484 |
| 11 | 1 | 0 | 1.241986 | -1.241129 | -0.829633 |
| 12 | 1 | 0 | 2.566259 | -0.259188 | -0.908434 |
| 13 | 1 | 0 | 2.515512 | -1.478070 | 0.200584 |

2-Azidoethanol

aaa, E = -318.0015734 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|------------------|------------------|----------------|-------------------------|-----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | -1.583464 | 0.475397 | -0.081927 |
| 2 | 1 | 0 | -1.556130 | 0.977282 | -1.054349 |
| 3 | 1 | 0 | -1.629015 | 1.233343 | 0.707635 |
| 4 | 6 | 0 | -0.332902 | -0.360837 | 0.095709 |
| 5 | 1 | 0 | -0.389854 | -0.922959 | 1.033426 |
| 6 | 1 | 0 | -0.223901 | -1.060279 | -0.738974 |
| 7 | 7 | 0 | 0.811143 | 0.578585 | 0.138776 |
| 8 | 7 | 0 | 1.923573 | 0.061670 | -0.000101 |
| 9 | 7 | 0 | 3.015360 | -0.296284 | -0.112786 |
| 10 | 1 | 0 | -3.475586 | 0.067387 | -0.237789 |
| 11 | 8 | 0 | -2.684731 | -0.423741 | 0.003267 |

aag, E = -318.001886 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|------------------|------------------|----------------|-------------------------|-----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | -1.592887 | 0.492077 | -0.051282 |
| 2 | 1 | 0 | -1.567721 | 1.073514 | -0.973813 |
| 3 | 1 | 0 | -1.644685 | 1.182608 | 0.797229 |
| 4 | 6 | 0 | -0.335552 | -0.354958 | 0.055909 |
| 5 | 1 | 0 | -0.366419 | -0.972568 | 0.960611 |
| 6 | 1 | 0 | -0.248638 | -1.005837 | -0.819864 |

| | | | | | |
|----|---|---|-----------|-----------|-----------|
| 7 | 7 | 0 | 0.812204 | 0.579481 | 0.127270 |
| 8 | 7 | 0 | 1.924066 | 0.056722 | 0.005468 |
| 9 | 7 | 0 | 3.015404 | -0.307290 | -0.091916 |
| 10 | 1 | 0 | -2.844333 | -0.778329 | 0.720791 |
| 11 | 8 | 0 | -2.752411 | -0.328061 | -0.124808 |

gaa, E = -318.0019064 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|------------------|------------------|----------------|-------------------------|-----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | -1.221853 | -0.345576 | 0.360241 |
| 2 | 1 | 0 | -1.289850 | -0.176060 | 1.439805 |
| 3 | 1 | 0 | -0.722178 | -1.305804 | 0.184385 |
| 4 | 6 | 0 | -0.420663 | 0.779266 | -0.273661 |
| 5 | 1 | 0 | -0.349272 | 0.634281 | -1.356581 |
| 6 | 1 | 0 | -0.896296 | 1.738721 | -0.073862 |
| 7 | 7 | 0 | 0.929507 | 0.868341 | 0.325965 |
| 8 | 7 | 0 | 1.707310 | -0.043332 | 0.019725 |
| 9 | 7 | 0 | 2.538838 | -0.816993 | -0.189665 |
| 10 | 1 | 0 | -3.055114 | -0.967870 | 0.206172 |
| 11 | 8 | 0 | -2.507722 | -0.322690 | -0.251447 |

gag, E = -318.0021934 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|------------------|------------------|----------------|-------------------------|-----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | 1.224570 | -0.336433 | -0.390675 |
| 2 | 1 | 0 | 1.287214 | -0.129588 | -1.459974 |
| 3 | 1 | 0 | 0.724336 | -1.302147 | -0.251881 |
| 4 | 6 | 0 | 0.427428 | 0.769171 | 0.293139 |
| 5 | 1 | 0 | 0.362555 | 0.589485 | 1.372473 |
| 6 | 1 | 0 | 0.906292 | 1.733155 | 0.124990 |
| 7 | 7 | 0 | -0.929078 | 0.884914 | -0.288410 |
| 8 | 7 | 0 | -1.705952 | -0.038273 | -0.015937 |
| 9 | 7 | 0 | -2.537885 | -0.818406 | 0.167158 |
| 10 | 1 | 0 | 2.527186 | -0.652153 | 1.015366 |
| 11 | 8 | 0 | 2.561355 | -0.379103 | 0.093071 |

gag⁻, E = -318.0021896 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|------------------|------------------|----------------|-------------------------|-----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | -1.214565 | -0.369863 | 0.357938 |
| 2 | 1 | 0 | -1.259795 | -0.212061 | 1.440644 |
| 3 | 1 | 0 | -0.718620 | -1.324230 | 0.167442 |
| 4 | 6 | 0 | -0.428243 | 0.765037 | -0.289729 |
| 5 | 1 | 0 | -0.360316 | 0.609850 | -1.371382 |
| 6 | 1 | 0 | -0.913159 | 1.723511 | -0.101207 |
| 7 | 7 | 0 | 0.922620 | 0.883075 | 0.305414 |
| 8 | 7 | 0 | 1.708049 | -0.028953 | 0.020530 |
| 9 | 7 | 0 | 2.545650 | -0.800703 | -0.171968 |
| 10 | 1 | 0 | -3.007435 | 0.306570 | 0.043201 |

11 8 0 -2.514758 -0.481077 -0.208224

aga, E = -318.0032008 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|------------------|------------------|----------------|-------------------------|-----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | 1.737259 | 0.464462 | 0.192121 |
| 2 | 1 | 0 | 1.779406 | 0.546568 | 1.283386 |
| 3 | 1 | 0 | 2.397744 | 1.221403 | -0.245713 |
| 4 | 6 | 0 | 0.330455 | 0.737249 | -0.277527 |
| 5 | 1 | 0 | 0.079830 | 1.787234 | -0.092572 |
| 6 | 1 | 0 | 0.251511 | 0.530592 | -1.350260 |
| 7 | 7 | 0 | -0.595570 | -0.138658 | 0.480622 |
| 8 | 7 | 0 | -1.764426 | -0.137503 | 0.084812 |
| 9 | 7 | 0 | -2.883807 | -0.224552 | -0.186433 |
| 10 | 1 | 0 | 2.953053 | -1.050127 | 0.165870 |
| 11 | 8 | 0 | 2.104849 | -0.842618 | -0.237660 |

agg, E = -318.003035 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|------------------|------------------|----------------|-------------------------|-----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | -1.751667 | 0.456984 | -0.166871 |
| 2 | 1 | 0 | -1.821342 | 0.623548 | -1.243161 |
| 3 | 1 | 0 | -2.427756 | 1.155997 | 0.338520 |
| 4 | 6 | 0 | -0.339863 | 0.743089 | 0.300219 |
| 5 | 1 | 0 | -0.122557 | 1.809592 | 0.171760 |
| 6 | 1 | 0 | -0.229821 | 0.486140 | 1.360283 |
| 7 | 7 | 0 | 0.597086 | -0.062221 | -0.517528 |
| 8 | 7 | 0 | 1.753108 | -0.123990 | -0.089915 |
| 9 | 7 | 0 | 2.862495 | -0.258028 | 0.201893 |
| 10 | 1 | 0 | -2.145225 | -1.041417 | 1.001897 |
| 11 | 8 | 0 | -2.149118 | -0.890578 | 0.051182 |

agg⁻, E = -318.0050563 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|------------------|------------------|----------------|-------------------------|-----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | 1.773073 | 0.426201 | 0.146323 |
| 2 | 1 | 0 | 1.898276 | 0.574407 | 1.224958 |
| 3 | 1 | 0 | 2.489876 | 1.057845 | -0.380867 |
| 4 | 6 | 0 | 0.369518 | 0.823198 | -0.257215 |
| 5 | 1 | 0 | 0.186211 | 1.876913 | -0.022484 |
| 6 | 1 | 0 | 0.226207 | 0.652085 | -1.328872 |
| 7 | 7 | 0 | -0.556810 | -0.037083 | 0.522661 |
| 8 | 7 | 0 | -1.709076 | -0.112569 | 0.085079 |
| 9 | 7 | 0 | -2.812750 | -0.258753 | -0.219437 |
| 10 | 1 | 0 | 1.385286 | -1.460999 | 0.198702 |
| 11 | 8 | 0 | 2.063631 | -0.917226 | -0.218025 |

gga, E = -318.0032189 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|------------------|------------------|----------------|-------------------------|-----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | 1.309438 | -0.112546 | 0.630142 |
| 2 | 1 | 0 | 0.694149 | -0.838034 | 1.175976 |
| 3 | 1 | 0 | 2.081264 | 0.265158 | 1.311252 |
| 4 | 6 | 0 | 0.459289 | 1.058412 | 0.185967 |
| 5 | 1 | 0 | 0.093616 | 1.600683 | 1.064729 |
| 6 | 1 | 0 | 1.048478 | 1.738389 | -0.428870 |
| 7 | 7 | 0 | -0.682746 | 0.649408 | -0.667472 |
| 8 | 7 | 0 | -1.516271 | -0.076487 | -0.116235 |
| 9 | 7 | 0 | -2.365939 | -0.754912 | 0.275021 |
| 10 | 1 | 0 | 2.314470 | -1.522196 | -0.247930 |
| 11 | 8 | 0 | 1.888794 | -0.705658 | -0.526377 |

ggg, E = -318.003423 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|------------------|------------------|----------------|-------------------------|-----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | 1.303787 | -0.125881 | 0.635960 |
| 2 | 1 | 0 | 0.687345 | -0.787039 | 1.249823 |
| 3 | 1 | 0 | 2.133264 | 0.236223 | 1.254917 |
| 4 | 6 | 0 | 0.493998 | 1.076636 | 0.180072 |
| 5 | 1 | 0 | 0.165431 | 1.647524 | 1.056377 |
| 6 | 1 | 0 | 1.095235 | 1.729041 | -0.454221 |
| 7 | 7 | 0 | -0.675128 | 0.703646 | -0.650986 |
| 8 | 7 | 0 | -1.486507 | -0.056171 | -0.112872 |
| 9 | 7 | 0 | -2.320247 | -0.759287 | 0.269156 |
| 10 | 1 | 0 | 2.342292 | -0.368674 | -0.985717 |
| 11 | 8 | 0 | 1.770363 | -0.922364 | -0.444307 |

ggg⁻, E = -318.004656 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|------------------|------------------|----------------|-------------------------|-----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | 1.348429 | -0.054535 | 0.658535 |
| 2 | 1 | 0 | 0.755796 | -0.717189 | 1.301889 |
| 3 | 1 | 0 | 2.141525 | 0.391208 | 1.262296 |
| 4 | 6 | 0 | 0.467505 | 1.048761 | 0.101176 |
| 5 | 1 | 0 | 0.050289 | 1.655233 | 0.912471 |
| 6 | 1 | 0 | 1.043303 | 1.686473 | -0.568898 |
| 7 | 7 | 0 | -0.622828 | 0.486851 | -0.738376 |
| 8 | 7 | 0 | -1.525418 | -0.081822 | -0.111405 |
| 9 | 7 | 0 | -2.435223 | -0.624159 | 0.349095 |
| 10 | 1 | 0 | 1.292172 | -1.115663 | -0.957647 |
| 11 | 8 | 0 | 1.988200 | -0.791439 | -0.375447 |

g⁻ga, E = -318.0051413 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|------------------|------------------|----------------|-------------------------|-----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | 1.609075 | -0.020125 | -0.201281 |

| | | | | | |
|----|---|---|-----------|-----------|-----------|
| 2 | 1 | 0 | 1.699090 | -0.141157 | -1.285814 |
| 3 | 1 | 0 | 2.592124 | -0.169347 | 0.260591 |
| 4 | 6 | 0 | 0.652912 | -1.056826 | 0.345402 |
| 5 | 1 | 0 | 1.048674 | -2.056343 | 0.165799 |
| 6 | 1 | 0 | 0.518679 | -0.916178 | 1.423537 |
| 7 | 7 | 0 | -0.657320 | -1.017930 | -0.340725 |
| 8 | 7 | 0 | -1.388390 | -0.059729 | -0.066330 |
| 9 | 7 | 0 | -2.189338 | 0.754797 | 0.104332 |
| 10 | 1 | 0 | 1.621974 | 1.923285 | -0.306104 |
| 11 | 8 | 0 | 1.074109 | 1.260186 | 0.124542 |

g⁻gg, E = -318.0049439 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|------------------|------------------|----------------|-------------------------|-----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | 1.602330 | -0.010066 | -0.231533 |
| 2 | 1 | 0 | 1.664918 | -0.149653 | -1.311870 |
| 3 | 1 | 0 | 2.600275 | -0.143304 | 0.201862 |
| 4 | 6 | 0 | 0.662613 | -1.045997 | 0.360046 |
| 5 | 1 | 0 | 1.064503 | -2.047405 | 0.200918 |
| 6 | 1 | 0 | 0.539562 | -0.884655 | 1.437536 |
| 7 | 7 | 0 | -0.657027 | -1.034980 | -0.306601 |
| 8 | 7 | 0 | -1.386596 | -0.067715 | -0.061656 |
| 9 | 7 | 0 | -2.188856 | 0.749975 | 0.088711 |
| 10 | 1 | 0 | 1.206946 | 1.514281 | 0.906632 |
| 11 | 8 | 0 | 1.120187 | 1.314518 | -0.031168 |

g⁻gg⁻, E = -318.0051412 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|------------------|------------------|----------------|-------------------------|-----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | 1.609083 | -0.020271 | -0.201602 |
| 2 | 1 | 0 | 1.698329 | -0.141214 | -1.286249 |
| 3 | 1 | 0 | 2.592423 | -0.169760 | 0.259517 |
| 4 | 6 | 0 | 0.652870 | -1.056719 | 0.345493 |
| 5 | 1 | 0 | 1.048361 | -2.056308 | 0.165793 |
| 6 | 1 | 0 | 0.518860 | -0.916019 | 1.423645 |
| 7 | 7 | 0 | -0.657422 | -1.017860 | -0.340504 |
| 8 | 7 | 0 | -1.388558 | -0.059594 | -0.066296 |
| 9 | 7 | 0 | -2.189665 | 0.754855 | 0.104116 |
| 10 | 1 | 0 | 1.621930 | 1.923071 | -0.306683 |
| 11 | 8 | 0 | 1.074737 | 1.260045 | 0.124927 |

Protonated 2-azidoethanol

aaa, E = -318.3939478 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|------------------|------------------|----------------|-------------------------|----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | -1.461508 | 0.535300 | 0.101344 |
| 2 | 1 | 0 | -1.572454 | 1.285331 | -0.676855 |

| | | | | | |
|----|---|---|-----------|-----------|-----------|
| 3 | 1 | 0 | -1.476918 | 0.989578 | 1.088005 |
| 4 | 6 | 0 | -0.262334 | -0.363998 | -0.121930 |
| 5 | 1 | 0 | -0.167059 | -1.091747 | 0.689240 |
| 6 | 1 | 0 | -0.344251 | -0.886620 | -1.079930 |
| 7 | 7 | 0 | 0.873659 | 0.574217 | -0.138397 |
| 8 | 7 | 0 | 1.984965 | 0.045478 | 0.000259 |
| 9 | 7 | 0 | 3.073234 | -0.312889 | 0.115759 |
| 10 | 1 | 0 | -2.895095 | -0.680573 | -0.814334 |
| 11 | 1 | 0 | -2.847060 | -0.887504 | 0.758015 |
| 12 | 8 | 0 | -2.734640 | -0.237990 | 0.039504 |

aag, E = -318.3943164 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|------------------|------------------|----------------|-------------------------|-----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | -1.456132 | 0.530579 | 0.083295 |
| 2 | 1 | 0 | -1.572214 | 1.248670 | -0.724829 |
| 3 | 1 | 0 | -1.467507 | 1.012513 | 1.056365 |
| 4 | 6 | 0 | -0.259652 | -0.377451 | -0.098126 |
| 5 | 1 | 0 | -0.153702 | -1.037376 | 0.766872 |
| 6 | 1 | 0 | -0.359257 | -0.976342 | -1.008880 |
| 7 | 7 | 0 | 0.874883 | 0.555054 | -0.215949 |
| 8 | 7 | 0 | 1.985775 | 0.049824 | -0.005985 |
| 9 | 7 | 0 | 3.073660 | -0.288882 | 0.161051 |
| 10 | 1 | 0 | -3.448307 | 0.084072 | 0.483750 |
| 11 | 1 | 0 | -2.912566 | -0.681921 | -0.791179 |
| 12 | 8 | 0 | -2.666495 | -0.347544 | 0.091633 |

gaa, E = -318.394104 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|------------------|------------------|----------------|-------------------------|-----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | 1.171202 | -0.267550 | -0.453693 |
| 2 | 1 | 0 | 1.333510 | 0.073350 | -1.472341 |
| 3 | 1 | 0 | 0.788062 | -1.285092 | -0.439635 |
| 4 | 6 | 0 | 0.331467 | 0.703087 | 0.360906 |
| 5 | 1 | 0 | 0.217795 | 0.361112 | 1.393634 |
| 6 | 1 | 0 | 0.774555 | 1.698331 | 0.356457 |
| 7 | 7 | 0 | -0.970456 | 0.830220 | -0.316083 |
| 8 | 7 | 0 | -1.805689 | -0.040805 | -0.021324 |
| 9 | 7 | 0 | -2.684806 | -0.760430 | 0.167916 |
| 10 | 1 | 0 | 3.085635 | 0.405524 | 0.077703 |
| 11 | 1 | 0 | 2.587601 | -0.781722 | 1.004180 |
| 12 | 8 | 0 | 2.552935 | -0.410951 | 0.102895 |

gag, E = -318.3943798 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|------------------|------------------|----------------|-------------------------|-----------|----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | -1.153313 | -0.274315 | 0.432601 |
| 2 | 1 | 0 | -1.321081 | -0.002838 | 1.472031 |
| 3 | 1 | 0 | -0.752186 | -1.280510 | 0.340422 |

| | | | | | |
|----|---|---|-----------|-----------|-----------|
| 4 | 6 | 0 | -0.329773 | 0.750312 | -0.326012 |
| 5 | 1 | 0 | -0.240062 | 0.470435 | -1.378868 |
| 6 | 1 | 0 | -0.771694 | 1.743262 | -0.248960 |
| 7 | 7 | 0 | 0.984595 | 0.839082 | 0.333527 |
| 8 | 7 | 0 | 1.792006 | -0.051094 | 0.018779 |
| 9 | 7 | 0 | 2.647409 | -0.794586 | -0.187459 |
| 10 | 1 | 0 | -2.970045 | -1.188755 | -0.019883 |
| 11 | 1 | 0 | -3.080866 | 0.385858 | -0.046621 |
| 12 | 8 | 0 | -2.491704 | -0.367156 | -0.238947 |

gag⁻, E = -318.3945412 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|------------------|------------------|----------------|-------------------------|-----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | 1.175141 | -0.266742 | -0.441810 |
| 2 | 1 | 0 | 1.343334 | 0.076921 | -1.458719 |
| 3 | 1 | 0 | 0.807438 | -1.290578 | -0.420514 |
| 4 | 6 | 0 | 0.324809 | 0.708818 | 0.351049 |
| 5 | 1 | 0 | 0.209654 | 0.386262 | 1.389864 |
| 6 | 1 | 0 | 0.775700 | 1.699686 | 0.326796 |
| 7 | 7 | 0 | -0.976432 | 0.820830 | -0.328851 |
| 8 | 7 | 0 | -1.809149 | -0.049087 | -0.025052 |
| 9 | 7 | 0 | -2.686209 | -0.769713 | 0.170283 |
| 10 | 1 | 0 | 2.598360 | -0.792003 | 1.000168 |
| 11 | 1 | 0 | 3.235435 | -0.585476 | -0.430567 |
| 12 | 8 | 0 | 2.541614 | -0.270185 | 0.177860 |

aga, E = -318.4006663 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|------------------|------------------|----------------|-------------------------|-----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | -1.734892 | 0.533272 | -0.149016 |
| 2 | 1 | 0 | -1.924797 | 0.650460 | -1.212147 |
| 3 | 1 | 0 | -2.504048 | 1.011302 | 0.450436 |
| 4 | 6 | 0 | -0.326408 | 0.917620 | 0.238056 |
| 5 | 1 | 0 | -0.122129 | 1.927406 | -0.128335 |
| 6 | 1 | 0 | -0.188616 | 0.881517 | 1.322346 |
| 7 | 7 | 0 | 0.517666 | -0.093524 | -0.435932 |
| 8 | 7 | 0 | 1.703987 | -0.122789 | -0.072810 |
| 9 | 7 | 0 | 2.821613 | -0.234659 | 0.171269 |
| 10 | 1 | 0 | -1.006514 | -1.344685 | -0.142339 |
| 11 | 1 | 0 | -2.125190 | -1.177071 | 0.983064 |
| 12 | 8 | 0 | -1.882971 | -0.937185 | 0.069380 |

agg, E = -318.4015986 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|------------------|------------------|----------------|-------------------------|----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | -1.728374 | 0.541356 | -0.160621 |
| 2 | 1 | 0 | -1.905435 | 0.596355 | -1.232507 |
| 3 | 1 | 0 | -2.483731 | 1.068878 | 0.413880 |
| 4 | 6 | 0 | -0.318665 | 0.914969 | 0.220606 |

| | | | | | |
|----|---|---|-----------|-----------|-----------|
| 5 | 1 | 0 | -0.100929 | 1.914867 | -0.163823 |
| 6 | 1 | 0 | -0.194860 | 0.896874 | 1.306908 |
| 7 | 7 | 0 | 0.520300 | -0.119133 | -0.424969 |
| 8 | 7 | 0 | 1.710633 | -0.130899 | -0.074645 |
| 9 | 7 | 0 | 2.831156 | -0.232920 | 0.160908 |
| 10 | 1 | 0 | -2.635105 | -1.339409 | -0.132465 |
| 11 | 1 | 0 | -1.029553 | -1.349888 | -0.069132 |
| 12 | 8 | 0 | -1.850347 | -0.893121 | 0.236021 |

agg⁻, E = -318.397889 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|------------------|------------------|----------------|-------------------------|-----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | -1.658587 | 0.584551 | -0.197655 |
| 2 | 1 | 0 | -1.731911 | 0.646493 | -1.280009 |
| 3 | 1 | 0 | -2.364004 | 1.246834 | 0.298848 |
| 4 | 6 | 0 | -0.255054 | 0.771906 | 0.299541 |
| 5 | 1 | 0 | -0.002930 | 1.824562 | 0.126894 |
| 6 | 1 | 0 | -0.190504 | 0.575801 | 1.375563 |
| 7 | 7 | 0 | 0.623989 | -0.124006 | -0.468720 |
| 8 | 7 | 0 | 1.801357 | -0.146760 | -0.085349 |
| 9 | 7 | 0 | 2.919121 | -0.264037 | 0.167301 |
| 10 | 1 | 0 | -2.102119 | -1.026659 | 1.054395 |
| 11 | 1 | 0 | -2.943077 | -1.054399 | -0.281201 |
| 12 | 8 | 0 | -2.074359 | -0.825969 | 0.100196 |

gga, E = -318.399517 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|------------------|------------------|----------------|-------------------------|-----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | 1.432531 | 0.399611 | 0.620991 |
| 2 | 1 | 0 | 1.037865 | 0.095868 | 1.587222 |
| 3 | 1 | 0 | 2.336249 | 0.993842 | 0.728405 |
| 4 | 6 | 0 | 0.384053 | 1.013997 | -0.285963 |
| 5 | 1 | 0 | -0.122372 | 1.827827 | 0.238090 |
| 6 | 1 | 0 | 0.834192 | 1.397029 | -1.201466 |
| 7 | 7 | 0 | -0.537260 | -0.073091 | -0.694147 |
| 8 | 7 | 0 | -1.603604 | -0.143161 | -0.056895 |
| 9 | 7 | 0 | -2.630650 | -0.299995 | 0.434638 |
| 10 | 1 | 0 | 1.046476 | -1.264152 | -0.442305 |
| 11 | 1 | 0 | 2.551944 | -0.788953 | -0.675416 |
| 12 | 8 | 0 | 1.852092 | -0.891173 | -0.003734 |

ggg, E = -318.400367 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|------------------|------------------|----------------|-------------------------|----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | 1.437753 | 0.392579 | 0.615119 |
| 2 | 1 | 0 | 1.053011 | 0.031798 | 1.567371 |
| 3 | 1 | 0 | 2.323755 | 1.009848 | 0.735022 |
| 4 | 6 | 0 | 0.374029 | 1.022172 | -0.259290 |
| 5 | 1 | 0 | -0.130338 | 1.815638 | 0.296351 |

| | | | | | |
|----|---|---|-----------|-----------|-----------|
| 6 | 1 | 0 | 0.817899 | 1.436020 | -1.164346 |
| 7 | 7 | 0 | -0.546709 | -0.054808 | -0.693826 |
| 8 | 7 | 0 | -1.607222 | -0.148261 | -0.050746 |
| 9 | 7 | 0 | -2.629949 | -0.325029 | 0.443422 |
| 10 | 1 | 0 | 2.419323 | -1.431826 | 0.350382 |
| 11 | 1 | 0 | 1.068945 | -1.247078 | -0.502208 |
| 12 | 8 | 0 | 1.882985 | -0.800779 | -0.163686 |

ggg⁻, E = -318.39718 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|------------------|------------------|----------------|-------------------------|-----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | 1.264833 | 0.027951 | 0.727175 |
| 2 | 1 | 0 | 0.735731 | -0.748730 | 1.274621 |
| 3 | 1 | 0 | 2.051500 | 0.476286 | 1.331026 |
| 4 | 6 | 0 | 0.350240 | 1.061454 | 0.116969 |
| 5 | 1 | 0 | -0.076879 | 1.636210 | 0.946389 |
| 6 | 1 | 0 | 0.909040 | 1.750862 | -0.516100 |
| 7 | 7 | 0 | -0.691759 | 0.470681 | -0.736612 |
| 8 | 7 | 0 | -1.602024 | -0.111693 | -0.127477 |
| 9 | 7 | 0 | -2.512156 | -0.674355 | 0.300811 |
| 10 | 1 | 0 | 2.523638 | -0.169160 | -0.927718 |
| 11 | 1 | 0 | 2.421860 | -1.502744 | -0.087783 |
| 12 | 8 | 0 | 1.923280 | -0.721448 | -0.392795 |

g⁻gg⁻, E = -318.3975246 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|------------------|------------------|----------------|-------------------------|-----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | 1.621754 | -0.230707 | -0.180487 |
| 2 | 1 | 0 | 1.716306 | -0.328539 | -1.258325 |
| 3 | 1 | 0 | 2.573402 | -0.371260 | 0.328531 |
| 4 | 6 | 0 | 0.518842 | -1.093328 | 0.378719 |
| 5 | 1 | 0 | 0.848945 | -2.128265 | 0.275203 |
| 6 | 1 | 0 | 0.357635 | -0.893172 | 1.442815 |
| 7 | 7 | 0 | -0.725528 | -0.965686 | -0.394830 |
| 8 | 7 | 0 | -1.460625 | -0.019643 | -0.073059 |
| 9 | 7 | 0 | -2.248345 | 0.797957 | 0.125280 |
| 10 | 1 | 0 | 1.342501 | 1.527928 | 0.923122 |
| 11 | 1 | 0 | 1.662322 | 1.818134 | -0.597216 |
| 12 | 8 | 0 | 1.212100 | 1.203874 | 0.011843 |

***N*-(2-Azidoethyl)ethanamide**

aag, E = -450.5141786 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|------------------|------------------|----------------|-------------------------|----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | 0.124893 | 0.911049 | -0.574480 |
| 2 | 1 | 0 | -0.164693 | 1.958261 | -0.676899 |
| 3 | 1 | 0 | 0.199490 | 0.466069 | -1.569187 |
| 4 | 6 | 0 | -0.915061 | 0.156692 | 0.242375 |

| | | | | | |
|----|---|---|-----------|-----------|-----------|
| 5 | 1 | 0 | -0.603164 | -0.883904 | 0.372875 |
| 6 | 1 | 0 | -1.037248 | 0.627246 | 1.223665 |
| 7 | 7 | 0 | -2.187405 | 0.212614 | -0.517214 |
| 8 | 7 | 0 | -3.181984 | -0.187045 | 0.096162 |
| 9 | 7 | 0 | -4.182414 | -0.531995 | 0.558248 |
| 10 | 7 | 0 | 1.424600 | 0.853876 | 0.062822 |
| 11 | 1 | 0 | 1.711508 | 1.613713 | 0.661465 |
| 12 | 6 | 0 | 2.229973 | -0.233141 | -0.053447 |
| 13 | 6 | 0 | 3.539999 | -0.167647 | 0.694990 |
| 14 | 1 | 0 | 3.686922 | 0.779036 | 1.216647 |
| 15 | 1 | 0 | 3.567774 | -0.985183 | 1.418618 |
| 16 | 1 | 0 | 4.354407 | -0.318208 | -0.016447 |
| 17 | 8 | 0 | 1.912076 | -1.211361 | -0.735936 |

gag, E = -450.51487 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|------------------|------------------|----------------|-------------------------|-----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | 0.102376 | -0.747779 | -0.684563 |
| 2 | 1 | 0 | 0.361589 | -1.574513 | -1.348260 |
| 3 | 1 | 0 | 0.352377 | 0.192857 | -1.182799 |
| 4 | 6 | 0 | 0.879627 | -0.864718 | 0.626652 |
| 5 | 1 | 0 | 0.577164 | -0.070014 | 1.315661 |
| 6 | 1 | 0 | 0.694301 | -1.832225 | 1.092664 |
| 7 | 7 | 0 | 2.340473 | -0.809518 | 0.387411 |
| 8 | 7 | 0 | 2.770276 | 0.296246 | 0.036580 |
| 9 | 7 | 0 | 3.304647 | 1.268943 | -0.284000 |
| 10 | 7 | 0 | -1.326243 | -0.772512 | -0.446272 |
| 11 | 1 | 0 | -1.821596 | -1.648955 | -0.516376 |
| 12 | 6 | 0 | -1.992834 | 0.333716 | -0.025997 |
| 13 | 6 | 0 | -3.470666 | 0.159505 | 0.229212 |
| 14 | 1 | 0 | -3.821193 | -0.854626 | 0.033168 |
| 15 | 1 | 0 | -3.676008 | 0.416614 | 1.270503 |
| 16 | 1 | 0 | -4.017566 | 0.859462 | -0.405837 |
| 17 | 8 | 0 | -1.423019 | 1.418118 | 0.126677 |

gag⁻, E = -450.5145153 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|------------------|------------------|----------------|-------------------------|-----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | -0.160975 | -0.350492 | -0.513613 |
| 2 | 1 | 0 | -0.079972 | 0.331770 | -1.362502 |
| 3 | 1 | 0 | -0.732493 | -1.228570 | -0.823597 |
| 4 | 6 | 0 | -0.859832 | 0.362648 | 0.643815 |
| 5 | 1 | 0 | -0.963957 | -0.310718 | 1.501438 |
| 6 | 1 | 0 | -0.283006 | 1.236577 | 0.942795 |
| 7 | 7 | 0 | -2.184855 | 0.880285 | 0.232275 |
| 8 | 7 | 0 | -3.047064 | 0.018270 | 0.023856 |
| 9 | 7 | 0 | -3.946146 | -0.674261 | -0.192195 |
| 10 | 7 | 0 | 1.166675 | -0.785903 | -0.131255 |
| 11 | 1 | 0 | 1.294717 | -1.724974 | 0.215175 |
| 12 | 6 | 0 | 2.218155 | 0.073656 | -0.108386 |
| 13 | 6 | 0 | 3.533882 | -0.504572 | 0.355232 |

| | | | | | |
|----|---|---|----------|-----------|-----------|
| 14 | 1 | 0 | 3.466835 | -1.560686 | 0.619978 |
| 15 | 1 | 0 | 4.268412 | -0.379231 | -0.443025 |
| 16 | 1 | 0 | 3.876922 | 0.063486 | 1.222466 |
| 17 | 8 | 0 | 2.105612 | 1.252022 | -0.457973 |

agg, E = -450.5160516 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|------------------|------------------|----------------|-------------------------|-----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | 0.228551 | -1.448376 | -0.446474 |
| 2 | 1 | 0 | -0.084690 | -1.928868 | -1.375426 |
| 3 | 1 | 0 | 0.773459 | -2.176724 | 0.157844 |
| 4 | 6 | 0 | -0.986586 | -0.978965 | 0.334606 |
| 5 | 1 | 0 | -1.635717 | -1.830327 | 0.566731 |
| 6 | 1 | 0 | -0.670688 | -0.496699 | 1.264906 |
| 7 | 7 | 0 | -1.709218 | -0.005359 | -0.520192 |
| 8 | 7 | 0 | -2.697555 | 0.520023 | 0.001059 |
| 9 | 7 | 0 | -3.636589 | 1.079833 | 0.373569 |
| 10 | 7 | 0 | 1.121953 | -0.356450 | -0.776937 |
| 11 | 1 | 0 | 0.964449 | 0.149666 | -1.635641 |
| 12 | 6 | 0 | 1.961714 | 0.179481 | 0.145553 |
| 13 | 6 | 0 | 2.726275 | 1.405639 | -0.293561 |
| 14 | 1 | 0 | 2.605020 | 1.624855 | -1.355365 |
| 15 | 1 | 0 | 2.374364 | 2.259770 | 0.290245 |
| 16 | 1 | 0 | 3.784518 | 1.257183 | -0.071530 |
| 17 | 8 | 0 | 2.094927 | -0.308982 | 1.271875 |

agg⁻, E = -450.5151933 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|------------------|------------------|----------------|-------------------------|-----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | 0.223859 | 1.560293 | 0.175146 |
| 2 | 1 | 0 | 0.355142 | 1.439018 | 1.250852 |
| 3 | 1 | 0 | 0.397929 | 2.608747 | -0.083283 |
| 4 | 6 | 0 | -1.194807 | 1.191135 | -0.221098 |
| 5 | 1 | 0 | -1.903174 | 1.842860 | 0.302252 |
| 6 | 1 | 0 | -1.334166 | 1.306187 | -1.302022 |
| 7 | 7 | 0 | -1.418506 | -0.223331 | 0.161031 |
| 8 | 7 | 0 | -2.571627 | -0.631872 | -0.004177 |
| 9 | 7 | 0 | -3.607226 | -1.131048 | -0.116934 |
| 10 | 7 | 0 | 1.205932 | 0.724913 | -0.482973 |
| 11 | 1 | 0 | 1.326097 | 0.821655 | -1.481069 |
| 12 | 6 | 0 | 1.897456 | -0.256287 | 0.153420 |
| 13 | 6 | 0 | 2.806804 | -1.081586 | -0.727725 |
| 14 | 1 | 0 | 2.883708 | -0.695535 | -1.745173 |
| 15 | 1 | 0 | 3.799492 | -1.112528 | -0.275053 |
| 16 | 1 | 0 | 2.418651 | -2.102484 | -0.761696 |
| 17 | 8 | 0 | 1.799555 | -0.469986 | 1.364763 |

ggg, E = -450.5159593 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|------------------|------------------|----------------|-------------------------|---|---|
| | | | X | Y | Z |

| | | | | | |
|----|---|---|-----------|-----------|-----------|
| 1 | 6 | 0 | -0.145763 | 0.730201 | 0.922592 |
| 2 | 1 | 0 | -0.834130 | 0.377515 | 1.694781 |
| 3 | 1 | 0 | 0.384841 | 1.603302 | 1.311528 |
| 4 | 6 | 0 | -0.911708 | 1.148747 | -0.327911 |
| 5 | 1 | 0 | -1.593283 | 1.973457 | -0.091618 |
| 6 | 1 | 0 | -0.218646 | 1.469364 | -1.103733 |
| 7 | 7 | 0 | -1.665805 | 0.016689 | -0.918715 |
| 8 | 7 | 0 | -2.608023 | -0.403930 | -0.238225 |
| 9 | 7 | 0 | -3.514316 | -0.888005 | 0.290797 |
| 10 | 7 | 0 | 0.812314 | -0.324464 | 0.658847 |
| 11 | 1 | 0 | 0.543324 | -1.283076 | 0.821828 |
| 12 | 6 | 0 | 1.987436 | -0.073470 | 0.028146 |
| 13 | 6 | 0 | 2.848208 | -1.277955 | -0.269860 |
| 14 | 1 | 0 | 2.451311 | -2.200661 | 0.155627 |
| 15 | 1 | 0 | 2.926227 | -1.388154 | -1.354070 |
| 16 | 1 | 0 | 3.849935 | -1.097869 | 0.124674 |
| 17 | 8 | 0 | 2.331524 | 1.072369 | -0.278219 |

ggg⁻, E = -450.5170655 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|---------------|---------------|-------------|-------------------------|-----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | 0.138523 | 1.371789 | -0.773783 |
| 2 | 1 | 0 | 0.382432 | 0.637548 | -1.544495 |
| 3 | 1 | 0 | 0.017399 | 2.346724 | -1.254085 |
| 4 | 6 | 0 | 1.269096 | 1.464419 | 0.246539 |
| 5 | 1 | 0 | 2.191508 | 1.787880 | -0.249347 |
| 6 | 1 | 0 | 1.018975 | 2.181468 | 1.028693 |
| 7 | 7 | 0 | 1.487872 | 0.181187 | 0.952651 |
| 8 | 7 | 0 | 1.937491 | -0.733324 | 0.253508 |
| 9 | 7 | 0 | 2.361920 | -1.666470 | -0.278369 |
| 10 | 7 | 0 | -1.116519 | 0.977371 | -0.169988 |
| 11 | 1 | 0 | -1.645918 | 1.669979 | 0.339307 |
| 12 | 6 | 0 | -1.544975 | -0.311709 | -0.147124 |
| 13 | 6 | 0 | -2.827286 | -0.558773 | 0.612622 |
| 14 | 1 | 0 | -3.326582 | 0.361426 | 0.919437 |
| 15 | 1 | 0 | -3.499416 | -1.145392 | -0.016033 |
| 16 | 1 | 0 | -2.592731 | -1.150059 | 1.501249 |
| 17 | 8 | 0 | -0.931644 | -1.224409 | -0.707358 |

g⁻gg, E = -450.5176513 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|---------------|---------------|-------------|-------------------------|-----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | 0.298124 | -1.565057 | 0.588672 |
| 2 | 1 | 0 | 0.753905 | -1.833553 | 1.543030 |
| 3 | 1 | 0 | -0.250085 | -2.429948 | 0.203042 |
| 4 | 6 | 0 | 1.385359 | -1.188448 | -0.413119 |
| 5 | 1 | 0 | 2.087282 | -2.015119 | -0.525896 |
| 6 | 1 | 0 | 0.945405 | -0.956216 | -1.386953 |
| 7 | 7 | 0 | 2.188101 | -0.039968 | 0.068688 |
| 8 | 7 | 0 | 1.670241 | 1.073070 | -0.079339 |

| | | | | | |
|----|---|---|-----------|-----------|-----------|
| 9 | 7 | 0 | 1.327867 | 2.172310 | -0.184170 |
| 10 | 7 | 0 | -0.623482 | -0.471364 | 0.829740 |
| 11 | 1 | 0 | -0.570427 | 0.032367 | 1.702560 |
| 12 | 6 | 0 | -1.558968 | -0.104381 | -0.084026 |
| 13 | 6 | 0 | -2.392096 | 1.100693 | 0.280147 |
| 14 | 1 | 0 | -2.368678 | 1.323000 | 1.348091 |
| 15 | 1 | 0 | -2.003776 | 1.964642 | -0.266882 |
| 16 | 1 | 0 | -3.421373 | 0.929612 | -0.037133 |
| 17 | 8 | 0 | -1.688232 | -0.701245 | -1.156792 |

g⁻gg⁻, E = -450.5175991 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|------------------|------------------|----------------|-------------------------|-----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | 0.640040 | -1.629472 | -0.050887 |
| 2 | 1 | 0 | 0.483085 | -1.763071 | 1.020145 |
| 3 | 1 | 0 | 0.734939 | -2.612897 | -0.520794 |
| 4 | 6 | 0 | 1.923317 | -0.840830 | -0.288399 |
| 5 | 1 | 0 | 2.777138 | -1.401801 | 0.092808 |
| 6 | 1 | 0 | 2.071251 | -0.655404 | -1.358266 |
| 7 | 7 | 0 | 1.930517 | 0.440196 | 0.451077 |
| 8 | 7 | 0 | 1.176951 | 1.324171 | 0.028311 |
| 9 | 7 | 0 | 0.557709 | 2.257613 | -0.259943 |
| 10 | 7 | 0 | -0.522280 | -0.948112 | -0.583995 |
| 11 | 1 | 0 | -0.677769 | -0.971726 | -1.581797 |
| 12 | 6 | 0 | -1.425797 | -0.289629 | 0.191997 |
| 13 | 6 | 0 | -2.531133 | 0.408943 | -0.562475 |
| 14 | 1 | 0 | -2.649957 | 0.038564 | -1.581983 |
| 15 | 1 | 0 | -3.466611 | 0.287198 | -0.015220 |
| 16 | 1 | 0 | -2.291955 | 1.475673 | -0.600982 |
| 17 | 8 | 0 | -1.327371 | -0.225959 | 1.419565 |

Water
1,2-Diazidoethane

aaa, E = -406.1999089 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|------------------|------------------|----------------|-------------------------|-----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | -0.397121 | 0.645393 | 0.118890 |
| 2 | 1 | 0 | -1.059017 | 0.678602 | 0.990282 |
| 3 | 1 | 0 | -0.995640 | 0.722063 | -0.794091 |
| 4 | 6 | 0 | 0.397121 | -0.645393 | 0.118890 |
| 5 | 1 | 0 | 0.995640 | -0.722063 | -0.794091 |
| 6 | 1 | 0 | 1.059017 | -0.678602 | 0.990282 |
| 7 | 7 | 0 | 0.591307 | 1.743853 | 0.189287 |
| 8 | 7 | 0 | 0.144880 | 2.869280 | -0.056955 |
| 9 | 7 | 0 | -0.144880 | 3.967264 | -0.262265 |
| 10 | 7 | 0 | -0.591307 | -1.743853 | 0.189287 |
| 11 | 7 | 0 | -0.144880 | -2.869280 | -0.056955 |
| 12 | 7 | 0 | 0.144880 | -3.967264 | -0.262265 |

aag, E = -406.2002744 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|---------------|---------------|-------------|-------------------------|-----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | -0.398848 | 0.003382 | 0.227167 |
| 2 | 1 | 0 | -0.536271 | 0.041933 | 1.312529 |
| 3 | 1 | 0 | -0.103757 | -1.011073 | -0.064001 |
| 4 | 6 | 0 | 0.657679 | 1.011987 | -0.195947 |
| 5 | 1 | 0 | 0.776142 | 1.006315 | -1.284415 |
| 6 | 1 | 0 | 0.373799 | 2.012861 | 0.126716 |
| 7 | 7 | 0 | -1.647164 | 0.382107 | -0.473157 |
| 8 | 7 | 0 | -2.666885 | -0.185118 | -0.065951 |
| 9 | 7 | 0 | -3.686900 | -0.644196 | 0.217824 |
| 10 | 7 | 0 | 1.944917 | 0.724562 | 0.470702 |
| 11 | 7 | 0 | 2.545181 | -0.274554 | 0.053532 |
| 12 | 7 | 0 | 3.216152 | -1.165980 | -0.242685 |

gag, E = -406.2007694 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|---------------|---------------|-------------|-------------------------|-----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | -0.750604 | 0.139557 | -0.702255 |
| 2 | 1 | 0 | -1.028430 | 0.685986 | -1.602842 |
| 3 | 1 | 0 | -1.037450 | 0.730050 | 0.175198 |
| 4 | 6 | 0 | 0.750604 | -0.139557 | -0.702255 |
| 5 | 1 | 0 | 1.037450 | -0.730050 | 0.175198 |
| 6 | 1 | 0 | 1.028430 | -0.685986 | -1.602842 |
| 7 | 7 | 0 | -1.517061 | -1.124397 | -0.740989 |
| 8 | 7 | 0 | -1.517061 | -1.771052 | 0.314991 |
| 9 | 7 | 0 | -1.613391 | -2.465860 | 1.231880 |
| 10 | 7 | 0 | 1.517061 | 1.124397 | -0.740989 |
| 11 | 7 | 0 | 1.517061 | 1.771052 | 0.314991 |
| 12 | 7 | 0 | 1.613391 | 2.465860 | 1.231880 |

gag⁻, E = -406.2006375 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|---------------|---------------|-------------|-------------------------|-----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | 0.365910 | -0.615090 | 0.265236 |
| 2 | 1 | 0 | 0.365964 | -0.621745 | 1.355736 |
| 3 | 1 | 0 | 1.401231 | -0.622643 | -0.090519 |
| 4 | 6 | 0 | -0.365910 | 0.615090 | -0.265236 |
| 5 | 1 | 0 | -0.365964 | 0.621745 | -1.355736 |
| 6 | 1 | 0 | -1.401231 | 0.622643 | 0.090519 |
| 7 | 7 | 0 | -0.336012 | -1.853402 | -0.135298 |
| 8 | 7 | 0 | -0.247845 | -2.144097 | -1.335520 |
| 9 | 7 | 0 | -0.238252 | -2.540409 | -2.419742 |
| 10 | 7 | 0 | 0.336012 | 1.853402 | 0.135298 |
| 11 | 7 | 0 | 0.247845 | 2.144097 | 1.335520 |
| 12 | 7 | 0 | 0.238252 | 2.540409 | 2.419742 |

aga, E = -406.2021528 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|------------------|------------------|----------------|-------------------------|-----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | -0.320853 | -0.682679 | 0.977608 |
| 2 | 1 | 0 | -0.041140 | -1.209944 | 1.895714 |
| 3 | 1 | 0 | -1.410752 | -0.586608 | 0.932539 |
| 4 | 6 | 0 | 0.320853 | 0.682679 | 0.977608 |
| 5 | 1 | 0 | 0.041140 | 1.209944 | 1.895714 |
| 6 | 1 | 0 | 1.410752 | 0.586608 | 0.932539 |
| 7 | 7 | 0 | -0.179402 | 1.419396 | -0.204725 |
| 8 | 7 | 0 | 0.320853 | 2.535148 | -0.379874 |
| 9 | 7 | 0 | 0.179402 | -1.419396 | -0.204725 |
| 10 | 7 | 0 | -0.320853 | -2.535148 | -0.379874 |
| 11 | 7 | 0 | 0.710098 | 3.586128 | -0.657387 |
| 12 | 7 | 0 | -0.710098 | -3.586128 | -0.657387 |

agg, E = -406.2022324 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|------------------|------------------|----------------|-------------------------|-----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | -0.886237 | 1.388619 | 0.083333 |
| 2 | 1 | 0 | -1.529370 | 1.757980 | 0.889295 |
| 3 | 1 | 0 | -0.666340 | 2.209258 | -0.598850 |
| 4 | 6 | 0 | 0.395724 | 0.841775 | 0.678764 |
| 5 | 1 | 0 | 0.869567 | 1.619599 | 1.287393 |
| 6 | 1 | 0 | 0.186228 | -0.023542 | 1.318455 |
| 7 | 7 | 0 | 1.287421 | 0.455587 | -0.436546 |
| 8 | 7 | 0 | 2.205847 | -0.314037 | -0.135649 |
| 9 | 7 | 0 | -1.608403 | 0.385306 | -0.730395 |
| 10 | 7 | 0 | -1.994806 | -0.614289 | -0.113449 |
| 11 | 7 | 0 | 3.103055 | -1.024490 | 0.013911 |
| 12 | 7 | 0 | -2.409830 | -1.594599 | 0.335146 |

agg⁻, E = -406.2035915 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|------------------|------------------|----------------|-------------------------|-----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | 1.000897 | 1.396086 | 0.263774 |
| 2 | 1 | 0 | 1.362552 | 2.385424 | -0.016514 |
| 3 | 1 | 0 | 1.145573 | 1.255860 | 1.340076 |
| 4 | 6 | 0 | -0.467602 | 1.282928 | -0.089631 |
| 5 | 1 | 0 | -1.029145 | 2.068402 | 0.428504 |
| 6 | 1 | 0 | -0.603711 | 1.386426 | -1.170932 |
| 7 | 7 | 0 | -0.923592 | -0.053369 | 0.356794 |
| 8 | 7 | 0 | -2.076737 | -0.355565 | 0.034435 |
| 9 | 7 | 0 | 1.827522 | 0.436632 | -0.497907 |
| 10 | 7 | 0 | 1.808337 | -0.733683 | -0.096178 |
| 11 | 7 | 0 | -3.134164 | -0.752774 | -0.202945 |
| 12 | 7 | 0 | 1.916485 | -1.851269 | 0.173515 |

ggg, E = -406.2023662 a.u.

| Center | Atomic | Atomic | Coordinates (Angstroms) | | |
|--------|--------|--------|-------------------------|--|--|
|--------|--------|--------|-------------------------|--|--|

| Number | Number | Type | X | Y | Z |
|--------|--------|------|-----------|-----------|-----------|
| 1 | 6 | 0 | -0.709889 | -0.275252 | 1.032187 |
| 2 | 1 | 0 | -0.852036 | -0.897155 | 1.923097 |
| 3 | 1 | 0 | -1.442547 | 0.532352 | 1.054227 |
| 4 | 6 | 0 | 0.709889 | 0.275252 | 1.032187 |
| 5 | 1 | 0 | 0.852036 | 0.897155 | 1.923097 |
| 6 | 1 | 0 | 1.442547 | -0.532352 | 1.054227 |
| 7 | 7 | 0 | 1.020449 | 1.043799 | -0.192430 |
| 8 | 7 | 0 | 0.297620 | 2.025200 | -0.400881 |
| 9 | 7 | 0 | -1.020449 | -1.043799 | -0.192430 |
| 10 | 7 | 0 | -0.297620 | -2.025200 | -0.400881 |
| 11 | 7 | 0 | -0.297620 | 2.963331 | -0.716752 |
| 12 | 7 | 0 | 0.297620 | -2.963331 | -0.716752 |

g⁻gg⁻, E = -406.2037031 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|---------------|---------------|-------------|-------------------------|-----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | -0.260727 | -0.715625 | 1.557914 |
| 2 | 1 | 0 | 0.102096 | -1.226331 | 2.451121 |
| 3 | 1 | 0 | -1.354910 | -0.721764 | 1.560374 |
| 4 | 6 | 0 | 0.260727 | 0.715625 | 1.557914 |
| 5 | 1 | 0 | -0.102096 | 1.226331 | 2.451121 |
| 6 | 1 | 0 | 1.354910 | 0.721764 | 1.560374 |
| 7 | 7 | 0 | -0.260727 | 1.483727 | 0.407237 |
| 8 | 7 | 0 | 0.391858 | 1.396695 | -0.640741 |
| 9 | 7 | 0 | 0.260727 | -1.483727 | 0.407237 |
| 10 | 7 | 0 | -0.391858 | -1.396695 | -0.640741 |
| 11 | 7 | 0 | 0.905786 | 1.427204 | -1.674921 |
| 12 | 7 | 0 | -0.905786 | -1.427204 | -1.674921 |

ggg⁻, E = -406.2038339 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|---------------|---------------|-------------|-------------------------|-----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | -0.445882 | 1.490467 | -0.381798 |
| 2 | 1 | 0 | -1.230335 | 2.133003 | 0.033523 |
| 3 | 1 | 0 | -0.019811 | 1.966741 | -1.263978 |
| 4 | 6 | 0 | 0.637579 | 1.262908 | 0.662840 |
| 5 | 1 | 0 | 1.048760 | 2.224922 | 0.970555 |
| 6 | 1 | 0 | 0.230377 | 0.760246 | 1.548096 |
| 7 | 7 | 0 | 1.773879 | 0.493827 | 0.115726 |
| 8 | 7 | 0 | 1.577878 | -0.718047 | -0.041311 |
| 9 | 7 | 0 | -1.019179 | 0.213889 | -0.865114 |
| 10 | 7 | 0 | -1.699266 | -0.409764 | -0.040721 |
| 11 | 7 | 0 | 1.555628 | -1.860183 | -0.213371 |
| 12 | 7 | 0 | -2.357393 | -1.091888 | 0.619871 |

2-Azidoethanamine

aaa, E = -298.1506449 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|------------------|------------------|----------------|-------------------------|-----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | -1.497066 | 0.746759 | 0.000000 |
| 2 | 1 | 0 | -1.945580 | 0.283183 | 0.882839 |
| 3 | 1 | 0 | -1.945580 | 0.283183 | -0.882839 |
| 4 | 6 | 0 | 0.000000 | 0.463305 | 0.000000 |
| 5 | 1 | 0 | 0.468091 | 0.894907 | -0.892218 |
| 6 | 1 | 0 | 0.468091 | 0.894907 | 0.892218 |
| 7 | 7 | 0 | 0.181981 | -1.011123 | 0.000000 |
| 8 | 7 | 0 | 1.354086 | -1.397745 | 0.000000 |
| 9 | 7 | 0 | 2.402280 | -1.883610 | 0.000000 |
| 10 | 7 | 0 | -1.826527 | 2.169437 | 0.000000 |
| 11 | 1 | 0 | -1.422686 | 2.622362 | 0.814525 |
| 12 | 1 | 0 | -1.422686 | 2.622362 | -0.814525 |

aag, E = -298.1500906 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|------------------|------------------|----------------|-------------------------|-----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | 1.579592 | 0.494308 | -0.043961 |
| 2 | 1 | 0 | 1.585686 | 1.181991 | 0.811933 |
| 3 | 1 | 0 | 1.563795 | 1.094285 | -0.957155 |
| 4 | 6 | 0 | 0.317375 | -0.346689 | 0.018001 |
| 5 | 1 | 0 | 0.223726 | -0.952769 | -0.888735 |
| 6 | 1 | 0 | 0.345052 | -1.010901 | 0.889659 |
| 7 | 7 | 0 | -0.836014 | 0.579449 | 0.139411 |
| 8 | 7 | 0 | -1.946343 | 0.056179 | 0.010187 |
| 9 | 7 | 0 | -3.037013 | -0.311044 | -0.089230 |
| 10 | 7 | 0 | 2.739727 | -0.397717 | -0.093625 |
| 11 | 1 | 0 | 3.578040 | 0.142479 | -0.282722 |
| 12 | 1 | 0 | 2.879401 | -0.828864 | 0.815579 |

gaa, E = -298.1511552 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|------------------|------------------|----------------|-------------------------|-----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | 1.196874 | -0.352054 | -0.384701 |
| 2 | 1 | 0 | 1.212760 | -0.176285 | -1.463738 |
| 3 | 1 | 0 | 0.678328 | -1.300797 | -0.213518 |
| 4 | 6 | 0 | 0.414441 | 0.778375 | 0.285091 |
| 5 | 1 | 0 | 0.365455 | 0.621520 | 1.369052 |
| 6 | 1 | 0 | 0.892085 | 1.739756 | 0.092172 |
| 7 | 7 | 0 | -0.956374 | 0.903086 | -0.270192 |
| 8 | 7 | 0 | -1.718621 | -0.034952 | -0.012748 |
| 9 | 7 | 0 | -2.535333 | -0.834287 | 0.160340 |
| 10 | 7 | 0 | 2.570954 | -0.486577 | 0.091762 |
| 11 | 1 | 0 | 3.079885 | 0.378538 | -0.064493 |
| 12 | 1 | 0 | 2.579215 | -0.651546 | 1.094045 |

gag, E = -298.1504917 a.u.

| Center | Atomic | Atomic | Coordinates (Angstroms) | | |
|--------|--------|--------|-------------------------|--|--|
|--------|--------|--------|-------------------------|--|--|

| Number | Number | Type | X | Y | Z |
|--------|--------|------|-----------|-----------|-----------|
| 1 | 6 | 0 | -1.185963 | -0.369726 | 0.326472 |
| 2 | 1 | 0 | -1.158865 | -0.280149 | 1.420389 |
| 3 | 1 | 0 | -0.698679 | -1.311576 | 0.056420 |
| 4 | 6 | 0 | -0.403916 | 0.790727 | -0.275506 |
| 5 | 1 | 0 | -0.345257 | 0.686651 | -1.363934 |
| 6 | 1 | 0 | -0.884943 | 1.740751 | -0.039170 |
| 7 | 7 | 0 | 0.958343 | 0.891689 | 0.302743 |
| 8 | 7 | 0 | 1.719782 | -0.039904 | 0.020287 |
| 9 | 7 | 0 | 2.534308 | -0.837172 | -0.170045 |
| 10 | 7 | 0 | -2.538175 | -0.376268 | -0.235791 |
| 11 | 1 | 0 | -3.020483 | -1.224507 | 0.044784 |
| 12 | 1 | 0 | -3.072303 | 0.394414 | 0.155358 |

gag⁻, E = -298.1504552 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|---------------|---------------|-------------|-------------------------|-----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | 1.205606 | -0.305402 | -0.393353 |
| 2 | 1 | 0 | 1.269432 | -0.095637 | -1.464032 |
| 3 | 1 | 0 | 0.674741 | -1.260020 | -0.270188 |
| 4 | 6 | 0 | 0.402121 | 0.803183 | 0.274246 |
| 5 | 1 | 0 | 0.354503 | 0.646173 | 1.358312 |
| 6 | 1 | 0 | 0.862225 | 1.771406 | 0.080693 |
| 7 | 7 | 0 | -0.970214 | 0.894499 | -0.279901 |
| 8 | 7 | 0 | -1.714138 | -0.055705 | -0.013058 |
| 9 | 7 | 0 | -2.516438 | -0.867432 | 0.168081 |
| 10 | 7 | 0 | 2.559317 | -0.316113 | 0.164606 |
| 11 | 1 | 0 | 2.537329 | -0.691642 | 1.108403 |
| 12 | 1 | 0 | 3.145717 | -0.943714 | -0.376649 |

aga, E = -298.1522033 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|---------------|---------------|-------------|-------------------------|-----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | -1.759115 | 0.475903 | -0.154406 |
| 2 | 1 | 0 | -1.854264 | 0.681022 | -1.224773 |
| 3 | 1 | 0 | -2.441901 | 1.149128 | 0.371755 |
| 4 | 6 | 0 | -0.340884 | 0.810896 | 0.282051 |
| 5 | 1 | 0 | -0.120627 | 1.869723 | 0.105596 |
| 6 | 1 | 0 | -0.209247 | 0.587596 | 1.347040 |
| 7 | 7 | 0 | 0.583711 | -0.027633 | -0.524597 |
| 8 | 7 | 0 | 1.733443 | -0.123520 | -0.087131 |
| 9 | 7 | 0 | 2.835991 | -0.285627 | 0.216742 |
| 10 | 7 | 0 | -2.172667 | -0.902872 | 0.093804 |
| 11 | 1 | 0 | -1.508524 | -1.532981 | -0.347668 |
| 12 | 1 | 0 | -2.128785 | -1.097725 | 1.090448 |

agg, E = -298.15207 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|---------------|---------------|-------------|-------------------------|---|---|
| | | | X | Y | Z |

| | | | | | |
|----|---|---|-----------|-----------|-----------|
| 1 | 6 | 0 | 1.744107 | 0.490163 | 0.174751 |
| 2 | 1 | 0 | 1.827025 | 0.630687 | 1.261232 |
| 3 | 1 | 0 | 2.410355 | 1.210573 | -0.307824 |
| 4 | 6 | 0 | 0.327360 | 0.812114 | -0.248014 |
| 5 | 1 | 0 | 0.069166 | 1.841817 | 0.019984 |
| 6 | 1 | 0 | 0.218651 | 0.673692 | -1.328934 |
| 7 | 7 | 0 | -0.575527 | -0.127096 | 0.469992 |
| 8 | 7 | 0 | -1.745697 | -0.140799 | 0.078781 |
| 9 | 7 | 0 | -2.863100 | -0.244603 | -0.195061 |
| 10 | 7 | 0 | 2.106533 | -0.856195 | -0.271166 |
| 11 | 1 | 0 | 3.064685 | -1.057746 | -0.000617 |
| 12 | 1 | 0 | 1.525852 | -1.531827 | 0.217918 |

agg⁻, E = -298.1502115 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|---------------|---------------|-------------|-------------------------|-----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | -1.728030 | 0.497168 | -0.164737 |
| 2 | 1 | 0 | -1.770153 | 0.683120 | -1.241318 |
| 3 | 1 | 0 | -2.369387 | 1.241425 | 0.327148 |
| 4 | 6 | 0 | -0.312267 | 0.738970 | 0.317757 |
| 5 | 1 | 0 | -0.067609 | 1.803822 | 0.242546 |
| 6 | 1 | 0 | -0.211499 | 0.427806 | 1.364389 |
| 7 | 7 | 0 | 0.624283 | -0.039208 | -0.531495 |
| 8 | 7 | 0 | 1.774400 | -0.135602 | -0.096372 |
| 9 | 7 | 0 | 2.879121 | -0.297743 | 0.201378 |
| 10 | 7 | 0 | -2.139516 | -0.884690 | 0.087611 |
| 11 | 1 | 0 | -2.255331 | -1.024225 | 1.087779 |
| 12 | 1 | 0 | -3.052261 | -1.048079 | -0.326520 |

gga, E = -298.1522917 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|---------------|---------------|-------------|-------------------------|-----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | 1.318232 | -0.042718 | 0.679188 |
| 2 | 1 | 0 | 0.708133 | -0.686033 | 1.322261 |
| 3 | 1 | 0 | 2.080690 | 0.416410 | 1.316040 |
| 4 | 6 | 0 | 0.445871 | 1.073974 | 0.112677 |
| 5 | 1 | 0 | 0.027837 | 1.686994 | 0.919718 |
| 6 | 1 | 0 | 1.026530 | 1.713538 | -0.553328 |
| 7 | 7 | 0 | -0.653415 | 0.537253 | -0.732457 |
| 8 | 7 | 0 | -1.528667 | -0.085030 | -0.121218 |
| 9 | 7 | 0 | -2.414144 | -0.678031 | 0.326286 |
| 10 | 7 | 0 | 1.981243 | -0.879891 | -0.317571 |
| 11 | 1 | 0 | 1.287352 | -1.273494 | -0.947023 |
| 12 | 1 | 0 | 2.589722 | -0.305060 | -0.894135 |

ggg, E = -298.1521449 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|---------------|---------------|-------------|-------------------------|---|---|
| | | | X | Y | Z |

| | | | | | |
|----|---|---|-----------|-----------|-----------|
| 1 | 6 | 0 | 1.324666 | -0.005728 | 0.660475 |
| 2 | 1 | 0 | 0.725735 | -0.646394 | 1.324663 |
| 3 | 1 | 0 | 2.097399 | 0.468217 | 1.272910 |
| 4 | 6 | 0 | 0.436670 | 1.090258 | 0.099037 |
| 5 | 1 | 0 | 0.014766 | 1.698379 | 0.906124 |
| 6 | 1 | 0 | 1.005077 | 1.729829 | -0.575781 |
| 7 | 7 | 0 | -0.662220 | 0.530617 | -0.734307 |
| 8 | 7 | 0 | -1.522238 | -0.100269 | -0.109973 |
| 9 | 7 | 0 | -2.393797 | -0.703584 | 0.350552 |
| 10 | 7 | 0 | 1.972747 | -0.737902 | -0.428722 |
| 11 | 1 | 0 | 2.562352 | -1.469636 | -0.042932 |
| 12 | 1 | 0 | 1.265215 | -1.209603 | -0.984907 |

ggg, E = -298.1510493 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|------------------|------------------|----------------|-------------------------|-----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | 1.279349 | -0.061932 | 0.638882 |
| 2 | 1 | 0 | 0.664587 | -0.662200 | 1.317379 |
| 3 | 1 | 0 | 2.119626 | 0.332686 | 1.227410 |
| 4 | 6 | 0 | 0.479182 | 1.136904 | 0.155359 |
| 5 | 1 | 0 | 0.180076 | 1.751091 | 1.011659 |
| 6 | 1 | 0 | 1.073538 | 1.752917 | -0.520961 |
| 7 | 7 | 0 | -0.725777 | 0.764697 | -0.628776 |
| 8 | 7 | 0 | -1.461931 | -0.073994 | -0.103797 |
| 9 | 7 | 0 | -2.229044 | -0.853325 | 0.271618 |
| 10 | 7 | 0 | 1.685203 | -0.910903 | -0.481105 |
| 11 | 1 | 0 | 2.329353 | -0.398767 | -1.077717 |
| 12 | 1 | 0 | 2.202480 | -1.710885 | -0.128803 |

gga, E = -298.1516445 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|------------------|------------------|----------------|-------------------------|-----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | 1.686522 | -0.129976 | -0.120177 |
| 2 | 1 | 0 | 1.914255 | -0.376784 | -1.160704 |
| 3 | 1 | 0 | 2.577464 | -0.355450 | 0.475314 |
| 4 | 6 | 0 | 0.568179 | -1.047326 | 0.370011 |
| 5 | 1 | 0 | 0.868780 | -2.091613 | 0.267360 |
| 6 | 1 | 0 | 0.338718 | -0.848476 | 1.423197 |
| 7 | 7 | 0 | -0.661697 | -0.900749 | -0.448646 |
| 8 | 7 | 0 | -1.457251 | -0.031509 | -0.078151 |
| 9 | 7 | 0 | -2.299544 | 0.718296 | 0.175197 |
| 10 | 7 | 0 | 1.415746 | 1.301562 | -0.038950 |
| 11 | 1 | 0 | 0.665144 | 1.562062 | -0.670004 |
| 12 | 1 | 0 | 1.126656 | 1.560864 | 0.899685 |

ggg, E = -298.151703 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|------------------|------------------|----------------|-------------------------|-----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | 1.671630 | -0.124268 | -0.098625 |

| | | | | | |
|----|---|---|-----------|-----------|-----------|
| 2 | 1 | 0 | 1.957446 | -0.364588 | -1.130639 |
| 3 | 1 | 0 | 2.541713 | -0.301598 | 0.540500 |
| 4 | 6 | 0 | 0.575054 | -1.077921 | 0.345730 |
| 5 | 1 | 0 | 0.881377 | -2.112555 | 0.185875 |
| 6 | 1 | 0 | 0.346670 | -0.928915 | 1.406119 |
| 7 | 7 | 0 | -0.657015 | -0.897153 | -0.464229 |
| 8 | 7 | 0 | -1.439798 | -0.026601 | -0.070192 |
| 9 | 7 | 0 | -2.271643 | 0.729167 | 0.198761 |
| 10 | 7 | 0 | 1.235288 | 1.264503 | 0.073071 |
| 11 | 1 | 0 | 2.043904 | 1.878013 | 0.081302 |
| 12 | 1 | 0 | 0.680959 | 1.553364 | -0.727665 |

g⁻gg⁻, E = -298.1524594 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|------------------|------------------|----------------|-------------------------|-----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | 1.620390 | -0.116887 | -0.209676 |
| 2 | 1 | 0 | 1.690604 | -0.281616 | -1.287959 |
| 3 | 1 | 0 | 2.594130 | -0.367819 | 0.234926 |
| 4 | 6 | 0 | 0.590140 | -1.076638 | 0.362854 |
| 5 | 1 | 0 | 0.921929 | -2.106812 | 0.230541 |
| 6 | 1 | 0 | 0.445899 | -0.893543 | 1.434571 |
| 7 | 7 | 0 | -0.709230 | -0.989886 | -0.341099 |
| 8 | 7 | 0 | -1.423882 | -0.019751 | -0.071289 |
| 9 | 7 | 0 | -2.217872 | 0.802352 | 0.099438 |
| 10 | 7 | 0 | 1.202399 | 1.266382 | 0.020927 |
| 11 | 1 | 0 | 1.315955 | 1.497601 | 1.004249 |
| 12 | 1 | 0 | 1.808402 | 1.899658 | -0.491237 |

2-Azidoethylammonium ion

aa, E = -298.5986324 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|------------------|------------------|----------------|-------------------------|-----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | 1.480112 | 0.533831 | -0.049335 |
| 2 | 1 | 0 | 1.545212 | 1.232773 | 0.783113 |
| 3 | 1 | 0 | 1.483256 | 1.079035 | -0.991606 |
| 4 | 6 | 0 | 0.248090 | -0.345068 | 0.069320 |
| 5 | 1 | 0 | 0.184218 | -1.032172 | -0.781300 |
| 6 | 1 | 0 | 0.271333 | -0.922668 | 0.999861 |
| 7 | 7 | 0 | -0.893379 | 0.588627 | 0.072938 |
| 8 | 7 | 0 | -2.004668 | 0.048493 | -0.001470 |
| 9 | 7 | 0 | -3.094188 | -0.321729 | -0.065098 |
| 10 | 7 | 0 | 2.715112 | -0.307281 | -0.019333 |
| 11 | 1 | 0 | 2.808355 | -0.817130 | 0.862303 |
| 12 | 1 | 0 | 2.723545 | -0.996289 | -0.775221 |
| 13 | 1 | 0 | 3.554732 | 0.267100 | -0.126316 |

ag, E = -298.5985211 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|------------------|------------------|----------------|-------------------------|---|---|
| | | | X | Y | Z |

| | | | | | |
|----|---|---|-----------|-----------|-----------|
| 1 | 6 | 0 | 1.149971 | -0.312178 | -0.403880 |
| 2 | 1 | 0 | 1.232269 | -0.095149 | -1.467777 |
| 3 | 1 | 0 | 0.728377 | -1.307105 | -0.263863 |
| 4 | 6 | 0 | 0.321094 | 0.753784 | 0.303673 |
| 5 | 1 | 0 | 0.229804 | 0.535649 | 1.372916 |
| 6 | 1 | 0 | 0.776038 | 1.736864 | 0.181198 |
| 7 | 7 | 0 | -1.005590 | 0.847408 | -0.330038 |
| 8 | 7 | 0 | -1.804543 | -0.048801 | -0.018157 |
| 9 | 7 | 0 | -2.653373 | -0.801215 | 0.187496 |
| 10 | 7 | 0 | 2.539865 | -0.346555 | 0.149893 |
| 11 | 1 | 0 | 3.026289 | 0.542473 | 0.007904 |
| 12 | 1 | 0 | 2.547557 | -0.546917 | 1.153195 |
| 13 | 1 | 0 | 3.098760 | -1.071308 | -0.306682 |

ga, E = -298.6032676 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|---------------|---------------|-------------|-------------------------|-----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | -1.684750 | 0.580787 | -0.190551 |
| 2 | 1 | 0 | -1.788964 | 0.689460 | -1.269086 |
| 3 | 1 | 0 | -2.391584 | 1.234143 | 0.318265 |
| 4 | 6 | 0 | -0.266337 | 0.859414 | 0.253963 |
| 5 | 1 | 0 | 0.004961 | 1.874372 | -0.050335 |
| 6 | 1 | 0 | -0.173169 | 0.773735 | 1.341982 |
| 7 | 7 | 0 | 0.582168 | -0.145018 | -0.422967 |
| 8 | 7 | 0 | 1.770120 | -0.150686 | -0.075308 |
| 9 | 7 | 0 | 2.893224 | -0.252963 | 0.159268 |
| 10 | 7 | 0 | -2.042031 | -0.831847 | 0.141084 |
| 11 | 1 | 0 | -1.342930 | -1.469659 | -0.252273 |
| 12 | 1 | 0 | -2.069085 | -0.989606 | 1.151117 |
| 13 | 1 | 0 | -2.957073 | -1.090045 | -0.234679 |

gg, E = -298.6023669 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|---------------|---------------|-------------|-------------------------|-----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | 1.301280 | 0.153715 | 0.718438 |
| 2 | 1 | 0 | 0.778428 | -0.474627 | 1.439174 |
| 3 | 1 | 0 | 2.089363 | 0.710159 | 1.224841 |
| 4 | 6 | 0 | 0.347541 | 1.088340 | -0.005588 |
| 5 | 1 | 0 | -0.126202 | 1.749500 | 0.725210 |
| 6 | 1 | 0 | 0.879199 | 1.699587 | -0.735529 |
| 7 | 7 | 0 | -0.654728 | 0.320830 | -0.777035 |
| 8 | 7 | 0 | -1.597969 | -0.130456 | -0.108273 |
| 9 | 7 | 0 | -2.532568 | -0.592562 | 0.383043 |
| 10 | 7 | 0 | 1.951318 | -0.763585 | -0.267264 |
| 11 | 1 | 0 | 1.242453 | -1.240281 | -0.832857 |
| 12 | 1 | 0 | 2.566221 | -0.257515 | -0.908733 |
| 13 | 1 | 0 | 2.515237 | -1.478745 | 0.197491 |

2-Azidoethanol

aaa, E = -318.0016906 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|------------------|------------------|----------------|-------------------------|-----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | -1.583430 | 0.475376 | -0.082047 |
| 2 | 1 | 0 | -1.556153 | 0.976955 | -1.054604 |
| 3 | 1 | 0 | -1.629156 | 1.233516 | 0.707305 |
| 4 | 6 | 0 | -0.332892 | -0.360823 | 0.095884 |
| 5 | 1 | 0 | -0.389809 | -0.922769 | 1.033699 |
| 6 | 1 | 0 | -0.223634 | -1.060332 | -0.738687 |
| 7 | 7 | 0 | 0.811207 | 0.578650 | 0.139013 |
| 8 | 7 | 0 | 1.923576 | 0.061722 | -0.000138 |
| 9 | 7 | 0 | 3.015288 | -0.296378 | -0.112976 |
| 10 | 1 | 0 | -3.475475 | 0.067230 | -0.238726 |
| 11 | 8 | 0 | -2.684792 | -0.423734 | 0.003337 |

aag, E = -318.0020193 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|------------------|------------------|----------------|-------------------------|-----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | -1.592951 | 0.492112 | -0.050541 |
| 2 | 1 | 0 | -1.568082 | 1.074614 | -0.972424 |
| 3 | 1 | 0 | -1.644519 | 1.181569 | 0.798841 |
| 4 | 6 | 0 | -0.335567 | -0.355029 | 0.055191 |
| 5 | 1 | 0 | -0.365702 | -0.973226 | 0.959467 |
| 6 | 1 | 0 | -0.249056 | -1.005188 | -0.821140 |
| 7 | 7 | 0 | 0.812207 | 0.579508 | 0.126349 |
| 8 | 7 | 0 | 1.924116 | 0.056750 | 0.005472 |
| 9 | 7 | 0 | 3.015497 | -0.307298 | -0.091209 |
| 10 | 1 | 0 | -2.843783 | -0.779775 | 0.720216 |
| 11 | 8 | 0 | -2.752562 | -0.327902 | -0.124642 |

gaa, E = -318.0020257 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|------------------|------------------|----------------|-------------------------|-----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | -1.222013 | -0.345788 | 0.360054 |
| 2 | 1 | 0 | -1.289741 | -0.176626 | 1.439676 |
| 3 | 1 | 0 | -0.722865 | -1.306168 | 0.183714 |
| 4 | 6 | 0 | -0.420637 | 0.778988 | -0.273730 |
| 5 | 1 | 0 | -0.348889 | 0.634037 | -1.356619 |
| 6 | 1 | 0 | -0.896233 | 1.738478 | -0.073984 |
| 7 | 7 | 0 | 0.929442 | 0.868059 | 0.326201 |
| 8 | 7 | 0 | 1.707532 | -0.043278 | 0.019786 |
| 9 | 7 | 0 | 2.539286 | -0.816638 | -0.189755 |
| 10 | 1 | 0 | -3.055102 | -0.968418 | 0.205471 |
| 11 | 8 | 0 | -2.508137 | -0.322188 | -0.251228 |

gag, E = -318.0023316 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|------------------|------------------|----------------|-------------------------|---|---|
| | | | X | Y | Z |

| | | | | | |
|----|---|---|-----------|-----------|-----------|
| 1 | 6 | 0 | 1.224686 | -0.336646 | -0.390570 |
| 2 | 1 | 0 | 1.287083 | -0.130013 | -1.459931 |
| 3 | 1 | 0 | 0.724834 | -1.302460 | -0.251344 |
| 4 | 6 | 0 | 0.427473 | 0.768914 | 0.293202 |
| 5 | 1 | 0 | 0.362423 | 0.589175 | 1.372473 |
| 6 | 1 | 0 | 0.906293 | 1.732928 | 0.125082 |
| 7 | 7 | 0 | -0.928982 | 0.884649 | -0.288625 |
| 8 | 7 | 0 | -1.706151 | -0.038201 | -0.015976 |
| 9 | 7 | 0 | -2.538312 | -0.818048 | 0.167246 |
| 10 | 1 | 0 | 2.527560 | -0.651505 | 1.015428 |
| 11 | 8 | 0 | 2.561621 | -0.378817 | 0.092998 |

gag⁻, E = -318.0023218 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|---------------|---------------|-------------|-------------------------|-----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | -1.214669 | -0.369888 | 0.357948 |
| 2 | 1 | 0 | -1.260022 | -0.211940 | 1.440610 |
| 3 | 1 | 0 | -0.718816 | -1.324316 | 0.167534 |
| 4 | 6 | 0 | -0.428278 | 0.764906 | -0.289809 |
| 5 | 1 | 0 | -0.360083 | 0.609594 | -1.371413 |
| 6 | 1 | 0 | -0.913142 | 1.723411 | -0.101404 |
| 7 | 7 | 0 | 0.922580 | 0.882884 | 0.305523 |
| 8 | 7 | 0 | 1.708181 | -0.028921 | 0.020569 |
| 9 | 7 | 0 | 2.545907 | -0.800511 | -0.172014 |
| 10 | 1 | 0 | -3.007495 | 0.306767 | 0.043201 |
| 11 | 8 | 0 | -2.514930 | -0.480974 | -0.208238 |

aga, E = -318.0033601 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|---------------|---------------|-------------|-------------------------|-----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | 1.736587 | 0.465346 | 0.194600 |
| 2 | 1 | 0 | 1.777256 | 0.544331 | 1.286145 |
| 3 | 1 | 0 | 2.395765 | 1.225115 | -0.240195 |
| 4 | 6 | 0 | 0.329865 | 0.736264 | -0.276307 |
| 5 | 1 | 0 | 0.075864 | 1.784482 | -0.086117 |
| 6 | 1 | 0 | 0.253232 | 0.535130 | -1.350245 |
| 7 | 7 | 0 | -0.595033 | -0.146660 | 0.475308 |
| 8 | 7 | 0 | -1.765387 | -0.138465 | 0.084014 |
| 9 | 7 | 0 | -2.885923 | -0.220205 | -0.184092 |
| 10 | 1 | 0 | 2.959188 | -1.043640 | 0.160899 |
| 11 | 8 | 0 | 2.108049 | -0.839721 | -0.238357 |

agg, E = -318.0032141 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|---------------|---------------|-------------|-------------------------|----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | -1.751429 | 0.457467 | -0.167869 |
| 2 | 1 | 0 | -1.820435 | 0.622614 | -1.244426 |
| 3 | 1 | 0 | -2.427059 | 1.157773 | 0.336257 |

| | | | | | |
|----|---|---|-----------|-----------|-----------|
| 4 | 6 | 0 | -0.339636 | 0.742684 | 0.299640 |
| 5 | 1 | 0 | -0.120901 | 1.808643 | 0.169326 |
| 6 | 1 | 0 | -0.230523 | 0.487396 | 1.360158 |
| 7 | 7 | 0 | 0.596914 | -0.065404 | -0.516077 |
| 8 | 7 | 0 | 1.753502 | -0.124457 | -0.089666 |
| 9 | 7 | 0 | 2.863352 | -0.256269 | 0.201384 |
| 10 | 1 | 0 | -2.148091 | -1.038534 | 1.002976 |
| 11 | 8 | 0 | -2.150371 | -0.889486 | 0.051949 |

agg⁻, E = -318.0051665 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|------------------|------------------|----------------|-------------------------|-----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | 1.773161 | 0.425975 | 0.145928 |
| 2 | 1 | 0 | 1.898783 | 0.574648 | 1.224434 |
| 3 | 1 | 0 | 2.490138 | 1.056925 | -0.381834 |
| 4 | 6 | 0 | 0.369737 | 0.823479 | -0.257449 |
| 5 | 1 | 0 | 0.187091 | 1.877414 | -0.023313 |
| 6 | 1 | 0 | 0.225918 | 0.651790 | -1.328928 |
| 7 | 7 | 0 | -0.556916 | -0.035754 | 0.523301 |
| 8 | 7 | 0 | -1.708864 | -0.112355 | 0.085198 |
| 9 | 7 | 0 | -2.812301 | -0.259448 | -0.219732 |
| 10 | 1 | 0 | 1.384068 | -1.461051 | 0.199127 |
| 11 | 8 | 0 | 2.062897 | -0.917943 | -0.217716 |

gga, E = -318.0033804 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|------------------|------------------|----------------|-------------------------|-----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | 1.309960 | -0.112218 | 0.630325 |
| 2 | 1 | 0 | 0.695330 | -0.838340 | 1.175987 |
| 3 | 1 | 0 | 2.081304 | 0.266236 | 1.311510 |
| 4 | 6 | 0 | 0.458832 | 1.057897 | 0.185896 |
| 5 | 1 | 0 | 0.092168 | 1.599698 | 1.064488 |
| 6 | 1 | 0 | 1.047519 | 1.738567 | -0.428661 |
| 7 | 7 | 0 | -0.682441 | 0.647609 | -0.668146 |
| 8 | 7 | 0 | -1.516983 | -0.076742 | -0.116422 |
| 9 | 7 | 0 | -2.367522 | -0.753782 | 0.275297 |
| 10 | 1 | 0 | 2.317651 | -1.520406 | -0.247102 |
| 11 | 8 | 0 | 1.890238 | -0.704927 | -0.526082 |

ggg, E = -318.0035865 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|------------------|------------------|----------------|-------------------------|-----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | 1.303872 | -0.126116 | 0.636230 |
| 2 | 1 | 0 | 0.687364 | -0.788732 | 1.248438 |
| 3 | 1 | 0 | 2.132042 | 0.236292 | 1.256686 |
| 4 | 6 | 0 | 0.493345 | 1.075901 | 0.180465 |
| 5 | 1 | 0 | 0.163598 | 1.646040 | 1.056768 |
| 6 | 1 | 0 | 1.094407 | 1.729026 | -0.453212 |
| 7 | 7 | 0 | -0.675017 | 0.702046 | -0.651513 |

| | | | | | |
|----|---|---|-----------|-----------|-----------|
| 8 | 7 | 0 | -1.487479 | -0.056430 | -0.113214 |
| 9 | 7 | 0 | -2.322115 | -0.758406 | 0.268968 |
| 10 | 1 | 0 | 2.346421 | -0.365932 | -0.983281 |
| 11 | 8 | 0 | 1.773142 | -0.920734 | -0.444407 |

ggg⁻, E = -318.0047786 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|------------------|------------------|----------------|-------------------------|-----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | 1.348709 | -0.054034 | 0.658528 |
| 2 | 1 | 0 | 0.756472 | -0.716523 | 1.302351 |
| 3 | 1 | 0 | 2.141807 | 0.392360 | 1.261787 |
| 4 | 6 | 0 | 0.467440 | 1.048742 | 0.100721 |
| 5 | 1 | 0 | 0.050208 | 1.655445 | 0.911805 |
| 6 | 1 | 0 | 1.043013 | 1.686309 | -0.569686 |
| 7 | 7 | 0 | -0.622910 | 0.486281 | -0.738492 |
| 8 | 7 | 0 | -1.525646 | -0.081891 | -0.111357 |
| 9 | 7 | 0 | -2.435565 | -0.623883 | 0.349305 |
| 10 | 1 | 0 | 1.292331 | -1.117676 | -0.956138 |
| 11 | 8 | 0 | 1.988515 | -0.791464 | -0.375226 |

g⁻ga, E = -318.0052708 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|------------------|------------------|----------------|-------------------------|-----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | 1.609351 | -0.020478 | -0.200778 |
| 2 | 1 | 0 | 1.700485 | -0.141963 | -1.285151 |
| 3 | 1 | 0 | 2.591882 | -0.169590 | 0.262151 |
| 4 | 6 | 0 | 0.652651 | -1.056842 | 0.345530 |
| 5 | 1 | 0 | 1.048188 | -2.056454 | 0.166071 |
| 6 | 1 | 0 | 0.517768 | -0.916234 | 1.423569 |
| 7 | 7 | 0 | -0.657356 | -1.017470 | -0.341277 |
| 8 | 7 | 0 | -1.388615 | -0.059639 | -0.066450 |
| 9 | 7 | 0 | -2.189599 | 0.754772 | 0.104724 |
| 10 | 1 | 0 | 1.624435 | 1.922920 | -0.304556 |
| 11 | 8 | 0 | 1.074277 | 1.260200 | 0.123803 |

g⁻gg, E = -318.0051014 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|------------------|------------------|----------------|-------------------------|-----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | 1.602424 | -0.009868 | -0.231407 |
| 2 | 1 | 0 | 1.665420 | -0.149533 | -1.311713 |
| 3 | 1 | 0 | 2.600214 | -0.142727 | 0.202386 |
| 4 | 6 | 0 | 0.662888 | -1.045986 | 0.360058 |
| 5 | 1 | 0 | 1.064893 | -2.047301 | 0.200742 |
| 6 | 1 | 0 | 0.539693 | -0.884776 | 1.437514 |
| 7 | 7 | 0 | -0.656804 | -1.034922 | -0.306745 |
| 8 | 7 | 0 | -1.386554 | -0.067899 | -0.061680 |
| 9 | 7 | 0 | -2.188931 | 0.749678 | 0.088792 |
| 10 | 1 | 0 | 1.205643 | 1.514195 | 0.906694 |
| 11 | 8 | 0 | 1.119787 | 1.314659 | -0.031262 |

Protonated 2-azidoethanol

aaa, E = -318.3950331 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|------------------|------------------|----------------|-------------------------|-----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | -1.460695 | 0.534068 | 0.103773 |
| 2 | 1 | 0 | -1.573957 | 1.288510 | -0.669790 |
| 3 | 1 | 0 | -1.471382 | 0.983010 | 1.092884 |
| 4 | 6 | 0 | -0.262542 | -0.364435 | -0.128796 |
| 5 | 1 | 0 | -0.165313 | -1.097588 | 0.677169 |
| 6 | 1 | 0 | -0.345926 | -0.880476 | -1.090201 |
| 7 | 7 | 0 | 0.873837 | 0.573861 | -0.141429 |
| 8 | 7 | 0 | 1.984741 | 0.045574 | 0.000766 |
| 9 | 7 | 0 | 3.072790 | -0.312437 | 0.119796 |
| 10 | 1 | 0 | -2.902899 | -0.669372 | -0.814391 |
| 11 | 1 | 0 | -2.842641 | -0.894599 | 0.755014 |
| 12 | 8 | 0 | -2.734754 | -0.237034 | 0.043190 |

aag, E = -318.3953944 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|------------------|------------------|----------------|-------------------------|-----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | -1.457020 | 0.530934 | 0.080711 |
| 2 | 1 | 0 | -1.575770 | 1.247412 | -0.728444 |
| 3 | 1 | 0 | -1.466699 | 1.014663 | 1.052913 |
| 4 | 6 | 0 | -0.259749 | -0.376045 | -0.100886 |
| 5 | 1 | 0 | -0.155997 | -1.038478 | 0.762461 |
| 6 | 1 | 0 | -0.356613 | -0.971918 | -1.013865 |
| 7 | 7 | 0 | 0.875324 | 0.556699 | -0.212657 |
| 8 | 7 | 0 | 1.985759 | 0.049733 | -0.005222 |
| 9 | 7 | 0 | 3.073383 | -0.290498 | 0.160708 |
| 10 | 1 | 0 | -3.447455 | 0.083195 | 0.485586 |
| 11 | 1 | 0 | -2.912888 | -0.686278 | -0.787503 |
| 12 | 8 | 0 | -2.665653 | -0.348684 | 0.093763 |

gaa, E = -318.3952158 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|------------------|------------------|----------------|-------------------------|-----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | 1.169850 | -0.266679 | -0.453387 |
| 2 | 1 | 0 | 1.332420 | 0.072804 | -1.472441 |
| 3 | 1 | 0 | 0.784194 | -1.283267 | -0.438031 |
| 4 | 6 | 0 | 0.331890 | 0.706427 | 0.360262 |
| 5 | 1 | 0 | 0.219305 | 0.367174 | 1.393973 |
| 6 | 1 | 0 | 0.774668 | 1.701779 | 0.352531 |
| 7 | 7 | 0 | -0.971356 | 0.832002 | -0.314980 |
| 8 | 7 | 0 | -1.804302 | -0.041352 | -0.021109 |
| 9 | 7 | 0 | -2.681604 | -0.763410 | 0.167589 |
| 10 | 1 | 0 | 3.085450 | 0.402295 | 0.078357 |
| 11 | 1 | 0 | 2.585447 | -0.785149 | 1.003338 |

12 8 0 2.551114 -0.413101 0.102566

gag, E = -318.3954753 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|------------------|------------------|----------------|-------------------------|-----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | -1.154490 | -0.275619 | 0.431747 |
| 2 | 1 | 0 | -1.320747 | -0.004673 | 1.471507 |
| 3 | 1 | 0 | -0.755413 | -1.282514 | 0.338522 |
| 4 | 6 | 0 | -0.329669 | 0.748015 | -0.326836 |
| 5 | 1 | 0 | -0.238327 | 0.466932 | -1.379181 |
| 6 | 1 | 0 | -0.771675 | 1.741045 | -0.251797 |
| 7 | 7 | 0 | 0.984047 | 0.837641 | 0.334274 |
| 8 | 7 | 0 | 1.793280 | -0.050570 | 0.019222 |
| 9 | 7 | 0 | 2.650229 | -0.792236 | -0.187309 |
| 10 | 1 | 0 | -2.969880 | -1.188959 | -0.026393 |
| 11 | 1 | 0 | -3.083799 | 0.385400 | -0.037406 |
| 12 | 8 | 0 | -2.493512 | -0.364432 | -0.238503 |

gag⁻, E = -318.3956429 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|------------------|------------------|----------------|-------------------------|-----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | 1.174159 | -0.267475 | -0.440487 |
| 2 | 1 | 0 | 1.341257 | 0.073389 | -1.458499 |
| 3 | 1 | 0 | 0.805476 | -1.290882 | -0.416129 |
| 4 | 6 | 0 | 0.325050 | 0.710787 | 0.350438 |
| 5 | 1 | 0 | 0.210003 | 0.391405 | 1.390204 |
| 6 | 1 | 0 | 0.776146 | 1.701452 | 0.322932 |
| 7 | 7 | 0 | -0.976884 | 0.821573 | -0.328792 |
| 8 | 7 | 0 | -1.808486 | -0.049275 | -0.025021 |
| 9 | 7 | 0 | -2.684670 | -0.771009 | 0.170366 |
| 10 | 1 | 0 | 2.599357 | -0.793272 | 0.999113 |
| 11 | 1 | 0 | 3.233907 | -0.585767 | -0.432287 |
| 12 | 8 | 0 | 2.541111 | -0.270652 | 0.177385 |

aga, E = -318.4016294 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|------------------|------------------|----------------|-------------------------|-----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | -1.734825 | 0.532579 | -0.147776 |
| 2 | 1 | 0 | -1.925248 | 0.650867 | -1.210690 |
| 3 | 1 | 0 | -2.503776 | 1.009871 | 0.452477 |
| 4 | 6 | 0 | -0.326588 | 0.917319 | 0.239067 |
| 5 | 1 | 0 | -0.124515 | 1.929067 | -0.123108 |
| 6 | 1 | 0 | -0.187499 | 0.876729 | 1.322994 |
| 7 | 7 | 0 | 0.519055 | -0.088893 | -0.440469 |
| 8 | 7 | 0 | 1.703922 | -0.122077 | -0.073402 |
| 9 | 7 | 0 | 2.820659 | -0.237193 | 0.173555 |
| 10 | 1 | 0 | -1.008318 | -1.346872 | -0.145208 |
| 11 | 1 | 0 | -2.123178 | -1.178576 | 0.983391 |
| 12 | 8 | 0 | -1.883055 | -0.937917 | 0.069326 |

agg, E = -318.402537 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|------------------|------------------|----------------|-------------------------|-----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | -1.727943 | 0.541171 | -0.160187 |
| 2 | 1 | 0 | -1.904902 | 0.596801 | -1.232036 |
| 3 | 1 | 0 | -2.483157 | 1.068788 | 0.414403 |
| 4 | 6 | 0 | -0.318455 | 0.914313 | 0.221552 |
| 5 | 1 | 0 | -0.101767 | 1.915824 | -0.159274 |
| 6 | 1 | 0 | -0.194195 | 0.892358 | 1.307715 |
| 7 | 7 | 0 | 0.521735 | -0.116237 | -0.428170 |
| 8 | 7 | 0 | 1.711024 | -0.130551 | -0.075036 |
| 9 | 7 | 0 | 2.830984 | -0.234750 | 0.162606 |
| 10 | 1 | 0 | -2.639086 | -1.336999 | -0.129292 |
| 11 | 1 | 0 | -1.033978 | -1.353025 | -0.072720 |
| 12 | 8 | 0 | -1.851341 | -0.893235 | 0.235901 |

agg⁻, E = -318.3989511 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|------------------|------------------|----------------|-------------------------|-----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | -1.659204 | 0.583900 | -0.195853 |
| 2 | 1 | 0 | -1.733749 | 0.648305 | -1.277966 |
| 3 | 1 | 0 | -2.364824 | 1.244313 | 0.302797 |
| 4 | 6 | 0 | -0.255508 | 0.772164 | 0.300431 |
| 5 | 1 | 0 | -0.005554 | 1.825969 | 0.131957 |
| 6 | 1 | 0 | -0.189160 | 0.571462 | 1.375418 |
| 7 | 7 | 0 | 0.625052 | -0.118338 | -0.472726 |
| 8 | 7 | 0 | 1.801039 | -0.146119 | -0.085919 |
| 9 | 7 | 0 | 2.917907 | -0.266982 | 0.169185 |
| 10 | 1 | 0 | -2.101468 | -1.029241 | 1.053466 |
| 11 | 1 | 0 | -2.941329 | -1.056384 | -0.282598 |
| 12 | 8 | 0 | -2.072954 | -0.827592 | 0.099460 |

gga, E = -318.4004896 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|------------------|------------------|----------------|-------------------------|-----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | 1.431130 | 0.395495 | 0.623288 |
| 2 | 1 | 0 | 1.034545 | 0.087784 | 1.587472 |
| 3 | 1 | 0 | 2.335732 | 0.987596 | 0.734940 |
| 4 | 6 | 0 | 0.384988 | 1.017022 | -0.281619 |
| 5 | 1 | 0 | -0.120903 | 1.828269 | 0.246956 |
| 6 | 1 | 0 | 0.836913 | 1.405113 | -1.194116 |
| 7 | 7 | 0 | -0.538150 | -0.065430 | -0.698305 |
| 8 | 7 | 0 | -1.601989 | -0.142333 | -0.057817 |
| 9 | 7 | 0 | -2.627297 | -0.304751 | 0.435670 |
| 10 | 1 | 0 | 1.044433 | -1.261558 | -0.450900 |
| 11 | 1 | 0 | 2.552462 | -0.790440 | -0.674882 |
| 12 | 8 | 0 | 1.849020 | -0.893033 | -0.007040 |

ggg, E = -318.4013404 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|------------------|------------------|----------------|-------------------------|-----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | 1.433391 | 0.386638 | 0.619621 |
| 2 | 1 | 0 | 1.043967 | 0.017288 | 1.566697 |
| 3 | 1 | 0 | 2.318894 | 1.002631 | 0.749664 |
| 4 | 6 | 0 | 0.374588 | 1.024769 | -0.254212 |
| 5 | 1 | 0 | -0.129056 | 1.816318 | 0.304875 |
| 6 | 1 | 0 | 0.822946 | 1.442982 | -1.155002 |
| 7 | 7 | 0 | -0.548970 | -0.045191 | -0.700053 |
| 8 | 7 | 0 | -1.605641 | -0.147651 | -0.052219 |
| 9 | 7 | 0 | -2.625747 | -0.331561 | 0.444976 |
| 10 | 1 | 0 | 2.420551 | -1.432788 | 0.343032 |
| 11 | 1 | 0 | 1.072521 | -1.246971 | -0.511470 |
| 12 | 8 | 0 | 1.883102 | -0.799635 | -0.167397 |

ggg⁻, E = -318.3982644 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|------------------|------------------|----------------|-------------------------|-----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | 1.263306 | 0.024150 | 0.727397 |
| 2 | 1 | 0 | 0.733260 | -0.756506 | 1.268190 |
| 3 | 1 | 0 | 2.046516 | 0.470203 | 1.337375 |
| 4 | 6 | 0 | 0.349857 | 1.059673 | 0.119082 |
| 5 | 1 | 0 | -0.077699 | 1.633279 | 0.949013 |
| 6 | 1 | 0 | 0.909818 | 1.749587 | -0.512474 |
| 7 | 7 | 0 | -0.692421 | 0.471119 | -0.736140 |
| 8 | 7 | 0 | -1.603407 | -0.111286 | -0.128290 |
| 9 | 7 | 0 | -2.514111 | -0.673754 | 0.299127 |
| 10 | 1 | 0 | 2.541845 | -0.162987 | -0.912582 |
| 11 | 1 | 0 | 2.413265 | -1.508092 | -0.095073 |
| 12 | 8 | 0 | 1.927948 | -0.716372 | -0.394525 |

g⁻gg⁻, E = -318.3986268 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|------------------|------------------|----------------|-------------------------|-----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | 1.621842 | -0.230298 | -0.180272 |
| 2 | 1 | 0 | 1.717019 | -0.328260 | -1.258012 |
| 3 | 1 | 0 | 2.573183 | -0.370793 | 0.329326 |
| 4 | 6 | 0 | 0.519153 | -1.093430 | 0.378559 |
| 5 | 1 | 0 | 0.849400 | -2.128220 | 0.274299 |
| 6 | 1 | 0 | 0.357851 | -0.893927 | 1.442745 |
| 7 | 7 | 0 | -0.725579 | -0.965755 | -0.394758 |
| 8 | 7 | 0 | -1.460621 | -0.019724 | -0.073127 |
| 9 | 7 | 0 | -2.248323 | 0.797901 | 0.125284 |
| 10 | 1 | 0 | 1.339632 | 1.527316 | 0.923388 |
| 11 | 1 | 0 | 1.664630 | 1.818220 | -0.595524 |
| 12 | 8 | 0 | 1.211747 | 1.203884 | 0.011533 |

N-(2-Azidoethyl)ethanamide

aag, E = -450.5143881 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|---------------|---------------|-------------|-------------------------|-----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | 0.124481 | 0.908233 | -0.577796 |
| 2 | 1 | 0 | -0.165560 | 1.954897 | -0.684342 |
| 3 | 1 | 0 | 0.199320 | 0.459378 | -1.570743 |
| 4 | 6 | 0 | -0.915027 | 0.156529 | 0.242079 |
| 5 | 1 | 0 | -0.601263 | -0.882644 | 0.379225 |
| 6 | 1 | 0 | -1.039690 | 0.632586 | 1.220350 |
| 7 | 7 | 0 | -2.186392 | 0.204952 | -0.519799 |
| 8 | 7 | 0 | -3.182190 | -0.186741 | 0.096675 |
| 9 | 7 | 0 | -4.183545 | -0.525551 | 0.561266 |
| 10 | 7 | 0 | 1.424211 | 0.854132 | 0.059699 |
| 11 | 1 | 0 | 1.709895 | 1.615645 | 0.656849 |
| 12 | 6 | 0 | 2.230351 | -0.232458 | -0.052752 |
| 13 | 6 | 0 | 3.539498 | -0.164173 | 0.696859 |
| 14 | 1 | 0 | 3.686890 | 0.785434 | 1.212992 |
| 15 | 1 | 0 | 3.565169 | -0.977285 | 1.425566 |
| 16 | 1 | 0 | 4.354647 | -0.320116 | -0.012551 |
| 17 | 8 | 0 | 1.913773 | -1.213029 | -0.732821 |

gag, E = -450.5150715 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|---------------|---------------|-------------|-------------------------|-----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | 0.102552 | -0.747450 | -0.685175 |
| 2 | 1 | 0 | 0.361430 | -1.573423 | -1.349917 |
| 3 | 1 | 0 | 0.352604 | 0.193728 | -1.182320 |
| 4 | 6 | 0 | 0.879845 | -0.866223 | 0.625850 |
| 5 | 1 | 0 | 0.577163 | -0.072812 | 1.316259 |
| 6 | 1 | 0 | 0.694974 | -1.834574 | 1.090247 |
| 7 | 7 | 0 | 2.340749 | -0.809856 | 0.386682 |
| 8 | 7 | 0 | 2.769817 | 0.296523 | 0.037085 |
| 9 | 7 | 0 | 3.303368 | 1.270037 | -0.282413 |
| 10 | 7 | 0 | -1.326019 | -0.772137 | -0.446635 |
| 11 | 1 | 0 | -1.820890 | -1.649042 | -0.514871 |
| 12 | 6 | 0 | -1.992640 | 0.333760 | -0.026189 |
| 13 | 6 | 0 | -3.470078 | 0.159027 | 0.230636 |
| 14 | 1 | 0 | -3.820403 | -0.855199 | 0.034845 |
| 15 | 1 | 0 | -3.674290 | 0.415821 | 1.272240 |
| 16 | 1 | 0 | -4.017976 | 0.858874 | -0.403684 |
| 17 | 8 | 0 | -1.423262 | 1.418747 | 0.125428 |

gag⁻, E = -450.5147341 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|---------------|---------------|-------------|-------------------------|-----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | -0.160779 | -0.350143 | -0.513802 |
| 2 | 1 | 0 | -0.079878 | 0.333635 | -1.361464 |
| 3 | 1 | 0 | -0.731853 | -1.227904 | -0.825409 |

| | | | | | |
|----|---|---|-----------|-----------|-----------|
| 4 | 6 | 0 | -0.860046 | 0.360518 | 0.644904 |
| 5 | 1 | 0 | -0.964904 | -0.314802 | 1.500851 |
| 6 | 1 | 0 | -0.283159 | 1.233580 | 0.946343 |
| 7 | 7 | 0 | -2.184654 | 0.879635 | 0.233711 |
| 8 | 7 | 0 | -3.047470 | 0.018620 | 0.023753 |
| 9 | 7 | 0 | -3.947036 | -0.672848 | -0.193576 |
| 10 | 7 | 0 | 1.167009 | -0.785554 | -0.131961 |
| 11 | 1 | 0 | 1.294817 | -1.724429 | 0.215189 |
| 12 | 6 | 0 | 2.218362 | 0.073802 | -0.108588 |
| 13 | 6 | 0 | 3.533904 | -0.504469 | 0.355350 |
| 14 | 1 | 0 | 3.466326 | -1.560229 | 0.621284 |
| 15 | 1 | 0 | 4.268317 | -0.380460 | -0.443241 |
| 16 | 1 | 0 | 3.877383 | 0.064366 | 1.221900 |
| 17 | 8 | 0 | 2.106170 | 1.252378 | -0.458265 |

agg, E = -450.5162202 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|------------------|------------------|----------------|-------------------------|-----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | 0.228328 | -1.447832 | -0.446824 |
| 2 | 1 | 0 | -0.084613 | -1.927831 | -1.376116 |
| 3 | 1 | 0 | 0.773084 | -2.176545 | 0.157194 |
| 4 | 6 | 0 | -0.987026 | -0.978976 | 0.334233 |
| 5 | 1 | 0 | -1.636022 | -1.830556 | 0.565849 |
| 6 | 1 | 0 | -0.671510 | -0.496984 | 1.264800 |
| 7 | 7 | 0 | -1.709766 | -0.005110 | -0.520166 |
| 8 | 7 | 0 | -2.698135 | 0.520014 | 0.001167 |
| 9 | 7 | 0 | -3.637210 | 1.079672 | 0.373817 |
| 10 | 7 | 0 | 1.121683 | -0.355612 | -0.776498 |
| 11 | 1 | 0 | 0.965891 | 0.149619 | -1.636048 |
| 12 | 6 | 0 | 1.962162 | 0.179347 | 0.145567 |
| 13 | 6 | 0 | 2.727497 | 1.404985 | -0.293483 |
| 14 | 1 | 0 | 2.606108 | 1.624423 | -1.355211 |
| 15 | 1 | 0 | 2.376266 | 2.259296 | 0.290478 |
| 16 | 1 | 0 | 3.785706 | 1.255771 | -0.071778 |
| 17 | 8 | 0 | 2.095415 | -0.309386 | 1.271956 |

agg⁻, E = -450.515454 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|------------------|------------------|----------------|-------------------------|-----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | 0.223329 | 1.558799 | 0.177825 |
| 2 | 1 | 0 | 0.353996 | 1.435911 | 1.253421 |
| 3 | 1 | 0 | 0.397720 | 2.607579 | -0.078947 |
| 4 | 6 | 0 | -1.195176 | 1.190714 | -0.219778 |
| 5 | 1 | 0 | -1.903546 | 1.842478 | 0.303457 |
| 6 | 1 | 0 | -1.333581 | 1.306414 | -1.300701 |
| 7 | 7 | 0 | -1.420276 | -0.223932 | 0.161372 |
| 8 | 7 | 0 | -2.573462 | -0.631530 | -0.005494 |
| 9 | 7 | 0 | -3.609325 | -1.129776 | -0.119860 |
| 10 | 7 | 0 | 1.205695 | 0.724572 | -0.481454 |
| 11 | 1 | 0 | 1.329992 | 0.826929 | -1.478499 |
| 12 | 6 | 0 | 1.898196 | -0.256767 | 0.152993 |

| | | | | | |
|----|---|---|----------|-----------|-----------|
| 13 | 6 | 0 | 2.811998 | -1.076625 | -0.728544 |
| 14 | 1 | 0 | 2.884116 | -0.691685 | -1.746735 |
| 15 | 1 | 0 | 3.805802 | -1.099065 | -0.277705 |
| 16 | 1 | 0 | 2.431768 | -2.100551 | -0.759969 |
| 17 | 8 | 0 | 1.798152 | -0.475009 | 1.363594 |

ggg, E = -450.5161536 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|------------------|------------------|----------------|-------------------------|-----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | -0.145934 | 0.728827 | 0.923931 |
| 2 | 1 | 0 | -0.834053 | 0.374250 | 1.695427 |
| 3 | 1 | 0 | 0.384520 | 1.601211 | 1.314724 |
| 4 | 6 | 0 | -0.912262 | 1.150120 | -0.325394 |
| 5 | 1 | 0 | -1.593929 | 1.974087 | -0.086864 |
| 6 | 1 | 0 | -0.219539 | 1.472753 | -1.100675 |
| 7 | 7 | 0 | -1.666292 | 0.019410 | -0.918882 |
| 8 | 7 | 0 | -2.607586 | -0.404018 | -0.238893 |
| 9 | 7 | 0 | -3.513071 | -0.890386 | 0.289366 |
| 10 | 7 | 0 | 0.812073 | -0.325300 | 0.657582 |
| 11 | 1 | 0 | 0.544948 | -1.284005 | 0.823161 |
| 12 | 6 | 0 | 1.987030 | -0.073626 | 0.027436 |
| 13 | 6 | 0 | 2.848909 | -1.277392 | -0.270122 |
| 14 | 1 | 0 | 2.449820 | -2.201251 | 0.150737 |
| 15 | 1 | 0 | 2.932190 | -1.384352 | -1.354243 |
| 16 | 1 | 0 | 3.848760 | -1.098731 | 0.129869 |
| 17 | 8 | 0 | 2.330620 | 1.072566 | -0.278933 |

ggg⁻, E = -450.5173091 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|------------------|------------------|----------------|-------------------------|-----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | 0.138400 | 1.371474 | -0.773791 |
| 2 | 1 | 0 | 0.382335 | 0.637296 | -1.544549 |
| 3 | 1 | 0 | 0.016708 | 2.346333 | -1.254043 |
| 4 | 6 | 0 | 1.269266 | 1.464734 | 0.246085 |
| 5 | 1 | 0 | 2.191395 | 1.788306 | -0.250164 |
| 6 | 1 | 0 | 1.019148 | 2.181706 | 1.028272 |
| 7 | 7 | 0 | 1.488805 | 0.181509 | 0.952259 |
| 8 | 7 | 0 | 1.938220 | -0.733166 | 0.253365 |
| 9 | 7 | 0 | 2.362470 | -1.666560 | -0.278282 |
| 10 | 7 | 0 | -1.116330 | 0.976913 | -0.169343 |
| 11 | 1 | 0 | -1.646741 | 1.670175 | 0.338050 |
| 12 | 6 | 0 | -1.545327 | -0.311680 | -0.146609 |
| 13 | 6 | 0 | -2.828476 | -0.558252 | 0.611793 |
| 14 | 1 | 0 | -3.325467 | 0.362046 | 0.921949 |
| 15 | 1 | 0 | -3.501970 | -1.140612 | -0.019406 |
| 16 | 1 | 0 | -2.595830 | -1.153637 | 1.498168 |
| 17 | 8 | 0 | -0.931863 | -1.225019 | -0.706143 |

g⁻gg, E = -450.5178264 a.u.

| Center | Atomic | Atomic | Coordinates (Angstroms) | | |
|--------|--------|--------|-------------------------|--|--|
|--------|--------|--------|-------------------------|--|--|

| Number | Number | Type | X | Y | Z |
|--------|--------|------|-----------|-----------|-----------|
| 1 | 6 | 0 | 0.296952 | -1.564350 | 0.589073 |
| 2 | 1 | 0 | 0.752330 | -1.832506 | 1.543695 |
| 3 | 1 | 0 | -0.251881 | -2.429095 | 0.204017 |
| 4 | 6 | 0 | 1.384635 | -1.189404 | -0.412793 |
| 5 | 1 | 0 | 2.085477 | -2.017019 | -0.525279 |
| 6 | 1 | 0 | 0.945084 | -0.956837 | -1.386729 |
| 7 | 7 | 0 | 2.188900 | -0.041784 | 0.068626 |
| 8 | 7 | 0 | 1.672529 | 1.071898 | -0.079481 |
| 9 | 7 | 0 | 1.331629 | 2.171574 | -0.184473 |
| 10 | 7 | 0 | -0.623750 | -0.469666 | 0.829227 |
| 11 | 1 | 0 | -0.571241 | 0.033592 | 1.702375 |
| 12 | 6 | 0 | -1.559789 | -0.103424 | -0.083954 |
| 13 | 6 | 0 | -2.393353 | 1.101388 | 0.279983 |
| 14 | 1 | 0 | -2.366107 | 1.327017 | 1.347112 |
| 15 | 1 | 0 | -2.008757 | 1.964266 | -0.271320 |
| 16 | 1 | 0 | -3.423642 | 0.927636 | -0.032615 |
| 17 | 8 | 0 | -1.689636 | -0.700809 | -1.156550 |

g^-g^- , E = -450.5178436 a.u.

| Center Number | Atomic Number | Atomic Type | Coordinates (Angstroms) | | |
|------------------|------------------|----------------|-------------------------|-----------|-----------|
| | | | X | Y | Z |
| 1 | 6 | 0 | 0.639804 | -1.629832 | -0.049988 |
| 2 | 1 | 0 | 0.483335 | -1.763112 | 1.021153 |
| 3 | 1 | 0 | 0.734476 | -2.613370 | -0.519632 |
| 4 | 6 | 0 | 1.922960 | -0.841355 | -0.288564 |
| 5 | 1 | 0 | 2.776963 | -1.402212 | 0.092359 |
| 6 | 1 | 0 | 2.070164 | -0.656216 | -1.358530 |
| 7 | 7 | 0 | 1.930576 | 0.440016 | 0.450597 |
| 8 | 7 | 0 | 1.177282 | 1.324151 | 0.027723 |
| 9 | 7 | 0 | 0.558279 | 2.257731 | -0.260607 |
| 10 | 7 | 0 | -0.522713 | -0.948770 | -0.583130 |
| 11 | 1 | 0 | -0.678387 | -0.973275 | -1.580909 |
| 12 | 6 | 0 | -1.425647 | -0.289200 | 0.192073 |
| 13 | 6 | 0 | -2.531438 | 0.408221 | -0.562724 |
| 14 | 1 | 0 | -2.649427 | 0.037870 | -1.582310 |
| 15 | 1 | 0 | -3.467028 | 0.285307 | -0.015886 |
| 16 | 1 | 0 | -2.293496 | 1.475235 | -0.601008 |
| 17 | 8 | 0 | -1.326830 | -0.223641 | 1.419737 |