

Dithiophosphorylation of nerol and geraniol trimethylsilyl derivatives

Nizamov I., Terenzhev D., Shumatbaev G., Batyeva E., Cherkasov R.
Kazan Federal University, 420008, Kremlevskaya 18, Kazan, Russia

Abstract

© 2017, Pleiades Publishing, Ltd. Reaction of tetraphosphorus decasulfide with O-(cis- and trans-3,7-dimethylocta-2,6-dien-1-yl)-trimethylsilanes affords O,O-bis(cis- and trans-3,7-dimethylocta-2,6-dien-1-yl) S-(trimethylsilyl)dithiophosphates.

<http://dx.doi.org/10.1134/S1070428017020026>

References

- [1] Poulter, J.W., Spurgeon, S.L., and Wiley, T., *Biosynthesis of Isoprenoid*, New York, 1983, vol. 2.
- [2] Plemenkov, V.V., *Khimiya izoprenoidov (The Chemistry of Isoprenoids)*, Barnaul Izd. Altais. Univer., 2007.
- [3] Plemenkov, V.V., *Vvedenie v khimiyu prirodnykh soedinenii (Introduction to the Chemistry of Natural Compounds)*, Kazan Izd. Kazan. Univer., 2001.
- [4] Nizamov, I.S., Bolshakova, O.V. Sergeenko, G.G., Yambushev, F.D., Batyeva, E.S., and Nizamov, I.D., *Russ. J. Gen. Chem.*, 2006, vol. 76, p. 1966. doi 10.1134/S1070363206120267
- [5] Nizamov, I.S., Nizamov, I.D., Yambushev, F.D., Bolshakova, O.V., Sergeenko, G.G., Mironov, V.F., and Batyeva, E.S., *Phosph., Sulfur, Silicon Relat. Elem.*, 2011, vol. 186, p. 1436. doi 10.1080/10426507.2010.515952
- [6] Shintou, T., Kikuchi, W., and Mukaiyama, T., *Bull. Chem. Soc. Jpn.*, 2003, vol. 76, p. 1645. doi 10.1246/bcsj.76.1645
- [7] Mel'nikov, N.N., Novozhilov, K.V., and Belan, S.R., *Pestitsidy and regulatory rosta rastenii (Pesticides and plant growth regulators)*, Moscow Khimiya, 1995.
- [8] Hoffmann, H. and Becke-Goehring, S., *Phosphorus Sulfides*. In *Topics in Phosphorus Chemistry*, Griffith, E.J., and Grayson, M., Eds., New York: Wiley, 1976, vol. 8, p. 193.
- [9] Olifirenko, S.P. and Zemlyanskii, N.I., *Zh. Obshch. Khim.*, 1960, vol. 30, p. 3487.
- [10] Zemlyanskii, N.I. and Mel'nik, Ya.I., *Zh. Obshch. Khim.*, 1970, vol. 40, p. 40.
- [11] Nizamov, I.S., Kuznetsov, V.A., Batyeva, E.S., Al'fonsov, V.A., and Pudovik, A.N., *Phosph., Sulfur, Silicon Relat. Elem.*, 1993, vol. 79, p. 179. doi 10.1080/10426509308034411
- [12] Nizamov, I.S., Kuznetsov, V.A., Batyeva, E.S., Alfonsov, V.A., and Pudovik, A.N., *Russ. Chem. Bull.*, 1992, vol. 41, p. 1517. doi 10.1007/BF00864364
- [13] Zhang, C., Patschinski, P., Stephenson, D.S., Panisch, R., Wender, J.H., Holthausen, M.C., and Zipse, H., *Phys. Chem. Chem. Phys.*, 2014, vol. 16, p. 16642. doi 10.1039/C4CP01736F