The Three-step Synthesis of 2,6-Dinitro-4-methylaniline

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This experiment entails the three-step synthesis of 2,6-Dinitro-4-methylaniline from *p*-toluiodine. *P*-toluidine was tosylated using tosyl chloride. The subsequent product was then dinitrated with nitric acid and then sulfonated using sulfuric acid to yield 2,6-dinitro-4-methylaniline. While *p*-toluiodine is known as a suspected cancer agent, 2,6-Dinitro-4-methylaniline is believed to have possible medicinal purposes making it important for future health applications. This synthesis was made more green by replacing sodium hydroxide with ethanol in step one. This is "greener" because ethanol is less corrosive and less health hazardous.