Synthesis and Structure of 2,6-Diazidotrichloropyridine N-Oxide

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Abstract—Pentachloropyridine N-oxide readily reacted with sodium azide in aqueous acetone at room temperature to produce 2,6-diazidotrichloropyridine N-oxide in high yield. The molecular and crystalline structures of the product were studied in detail by X-ray analysis and quantum-chemical calculations. Unusual geometric parameters of the azido groups and reactivity of the diazide were rationalized by the presence of strong intramolecular contacts $N\cdots O$ with an energy of ~ 6.1 kcal/mol.

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