

# Bromination of 1-Hydroxyimidazoles. Synthesis and Crystal Structures

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Bromination of 1-hydroxyimidazole 3-oxide and 1-hydroxy-2-methylimidazole 3-oxide using bromine in acetic acid gave 2-bromo-1,3-dihydroxyimidazole hydrobromide and 4,5-dibromo-1,3-dihydroxy-2-methylimidazole hydrobromide, respectively. In contrast, bromination in aqueous mixture (acetic acid, methanol, dimethylformamide, tetrahydrofuran) yielded 2,4,5-tribromo-1-hydroxyimidazole. Crystal structures of four compounds were determined by X-ray diffraction.

*Key words:* Bromination, Crystal Structure, Imidazole, *N*-Oxide