

Syntheses, Spectral, Thermal and Structural Characterization of 2-Hydroxyanilinium and 2-Amino-3-hydroxy-pyridinium Squarates

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New salts of 2-hydroxyaniline and 2-amino-3-hydroxypyridine with squaric acid were synthesized and characterized by elemental analyses, IR spectroscopy and thermal analyses (TG, DTG and DTA). The crystal structures of bis(2-hydroxyanilinium) squarate, $[(C_6H_8NO^+)_2(C_4O_4)^{2-}]$ (**1**) and bis(2-amino-3-hydroxy-pyridinium) squarate dihydrate, $[(C_5H_7N_2O^+)_2(C_4O_4)^{2-}] \cdot 2 H_2O$ (**2**) were determined by single crystal X-ray diffraction. Both compounds crystallize in the monoclinic system, space group $P2_1/c$. The organic ammonium squarates decompose in two thermal steps.

Key words: Squaric Acid, Squarate Salts, Thermal Analyses