Synthesis and Structure of 1,3-Diisopropyl-4,5-dimethylimidazolium N,N'-Diphenylureate [1]

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Dedicated to Professor Dietrich Döpp on the occasion of his 65th birthday

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Imidazoles, Urea, Hydrogen Bonding, Crystal Structure

1,3-Diisopropyl-4,5-dimethylimidazolium diphenylureate (4) has been obtained from 2,3-dihydro-1,3-diisopropyl-3,4-dimethylimidazol-2-ylidene (3) and N,N'-diphenylurea in good yield. The crystal structure of 4 contains dimeric ureate anions linked by unsymmetrical NHN hydrogen bonds while only weak interactions are detected between the imidazolium cations and the anions.