

Bis[1,3-dimethylbarbituryl(5)]sulfid – Struktur und Reaktionen

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Bis[1,3-dimethylbarbituryl(5)]sulfide (**3**, $[\text{BarbH}]_2\text{S}$, $\text{BarbH} = 1,3\text{-dimethylbarbitur-5-yl}$) was obtained from 1,3-dimethylbarbituric acid (**2**) and SCl_2 or SOCl_2 . The compound **3** reacted with 2,3-dihydro-1,3-diisopropyl-4,5-dimethylimidazol-2-ylidene (**7**, Im) to give the imidazolium salts $[\text{ImH}][\text{BarbH-S-Barb}]$ (**8**) and $[\text{ImH}]_2[\text{Barb-S-Barb}]$ (**9**) in which the ions are linked by hydrogen bonds. From **3** and triphenylphosphane, the zwitterionic compound Barb-S-PPh_3 (**10**) was obtained. The crystal structures of the compounds **3**, **8**, **9** and **10** were discussed.

Key words: Heterocycles, Imidazoles, Barbituric Acid, Hydrogen Bond, Crystal Structure