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J. Meindla; J. Příhoda

^a Department of Inorganic Chemistry Faculty of Science, J.E.Purkyně-University, Brno, Czechoslovakia

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THERMAL BEHAVIOR OF PYRIDINIUM SALT OF 2,4-DIMER-CAPTO-2,4-DITHIOXO-1,3-BIS(TRIMETHYLSILYL)-1,3-DIAZA-2 λ^5 ,4 λ^5 -DIPHOSPHETIDINE

J.MEINDL and J.PŘÍHODA

Department of Inorganic Chemistry, Faculty of Science, J.E.Purkyně-University, Kotlářská 2, 611 37 Brno, Czechoslovakia

The reaction of P_4S_{10} with $PSCl_3$ in pyridine leads to $Py.PS_2Cl$ (1). This substance yields by the reaction with hexamethyldisilazane in molar ratio 1:1 a new substance that was identified as pyridinium salt of 2,4-dimercapto-2,4-dithioxo-1,3-bis(trimethylsilyl)-1,3-diaza-2 λ^5 ,4 λ^5 -diphosphetidine $(PyH)_2/S_2P(NSiMe_3)_2PS_2/(I).(2)$.

The thermal degradation of (I) was studied by using methods of thermal analysis with the aim to prepare corresponding acid form of diazadiphosphetidine HS(S)P(NSiMe₃)₂P(S)SH (II). The existence of (II) was proved before by mass-spectrometry.

It was found that (I) decomposes by heating into pyridine and Me₃SiSH, or (Me₃Si)₂S respectively, the solid rest was identified as (PNS)_n polymer. The preparation of (II) by this way was unsuccessful.

- (1) M.Meisel: Dissertation, Berlin 1968
- (2) J.Příhoda, G.Grossmann, G.Ohms, M.Meisel: Z.anorg.allg.Chem. <u>549</u> (1987) 59