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Nota di contenuto	FUSED PYRIMIDINES: PURINES; Contents; Tables; I. Introduction to the Purines; 1. History; TABLE 1. Trivial Names of Purines; 2. Nomenclature and Notation; 3. The Basis of Purine Chemistry; A. The Electrophilic Character of the 2-, 6- and 8-Carbon Atoms; B. The Nucleophilic Character of the 8-Carbon Atom; C. Tautomeric Groups; 4. General Summary of Purine Chemistry; A. Electrophilic Substitution; (a) Nitration; (b) Diazo Coupling; (c) Halogenation; (d) Alkylation; B. Nucleophilic Substitution; (a) Halogen Replacement by Amino Groups; (b) Halogen Replacement by Methoxy and Other Alkoxy Groups (c) Halogen Replacement by Oxo Group(d) Halogen Replacement by Alkylthio Groups; (e) Halogen Replacement by Thio Group; (f) Halogen Replacement by Thiocyanato and Cyano Groups; (g) Halogen Replacement by Sulpho Groups; (h) Replacement of Methoxy, Methylthio, and Methylsulphonyl Groups; C. Group Interconversion; (a) Interchange of Halogen Atoms; (b) Oxo- to Aminopurines; (c) Oxo- to Chloropurines; (d) Oxo- to Thiopurines; (e) Thio- (and Methylthio-) to Oxopurines; (f) Thio- (and Methylthio-) to Halogenopurines; (g) Thio-

to Aminopurines; (h) Interchange of Amino Groups  
(i) Amino- to Oxopurines(j) Amino- to Halogenopurines; D. Addition Reactions; (a) The Michael Reaction; (b) Quaternisation; (c) Formation of N-Oxides; (d) Addition of Water and Alcohols; E. Modification of Substituents; (a) Amino Groups; (b) Oxo Groups; (c) Thio Groups; (d) Methyl Groups; F. Reductive Reactions; (a) Nuclear Reduction; (b) Removal of Groups; (c) Reductive Modification of Groups; G. Oxidative Reactions; (a) Chemical Oxidation; (b) Free Radical Attack; (c) Enzymic Oxidation; 5. Physical Properties of Purines; A. Electronic Considerations; B. Ionisation Constants  
C. Crystal StructureD. Dipole Moments; E. Polarography; F. Solubility and Melting Point; G. Spectra; Chapter II. Syntheses from Pyrimidines; 1. Use of 4,5-Diaminopyrimidines (The Traube Synthesis); A. History and General Application; B. Cyclisation with Formic Acid; C. Cyclisation with Dithioformic Acid; D. Cyclisation with Other Carboxylic Acids; E. Cyclisation with Acid Anhydride; F. Cyclisation with Acid Chlorides; G. Cyclisation with Orthoesters and Diethoxymethyl Acetate  
TABLE 2. Cyclisation of 4,5-Diamino-6-dimethylamino-2-methylthiopyrimidine to 6-dimethylamino-2-methylthiopurine with OrthoestersH. Cyclisation with Formamide; I. Cyclisation with Other Amides; J. Cyclisation with NN-Dialkylamides and Phosphoryl Chloride; K. Cyclisation with Amidines; L. Cyclisation with Guanidines; M. Cyclisation with Urea; N. Cyclisation with Thiourea; O. Cyclisation with Cyanates, Isocyanates, and Derivatives; P. Cyclisation with Isothiocyanates; Q. Cyclisation with Carbon Dioxide; R. Cyclisation with Carbon Disulphide; S. Cyclisation with Phosgene  
T. Cyclisation with Thiophosgene

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Sommario/riassunto

Chemistry of Heterocyclic Compounds publishes articles, letters to the Editor, reviews, and minireviews on the synthesis, structure, reactivity, and biological activity of heterocyclic compounds including natural products. The journal covers investigations in heterocyclic chemistry taking place in scientific centers of all over the world, including extensively the scientific institutions in Russia, Ukraine, Latvia, Lithuania and Belarus.

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