

Title	Bis (4-Methyl-2-thiazolyl) guanidines. preparation and physicochemical properties.
Sub Title	
Author	与田, 玲子(Yoda, Reiko) 松島, 美一(Matsushima, Yoshikazu)
Publisher	共立薬科大学
Publication year	1988
Jtitle	共立薬科大学研究年報 (The annual report of the Kyoritsu College of Pharmacy). No.33 (1988.) ,p.143- 143
JaLC DOI	
Abstract	
Notes	抄録
Genre	Technical Report
URL	https://koara.lib.keio.ac.jp/xoonips/modules/xoonips/detail.php?koara_id=AN00062898-00000033-0143

慶應義塾大学学術情報リポジトリ(KOARA)に掲載されているコンテンツの著作権は、それぞれの著作者、学会または出版社/発行者に帰属し、その権利は著作権法によって保護されています。引用にあたっては、著作権法を遵守してご利用ください。

The copyrights of content available on the KeiO Associated Repository of Academic resources (KOARA) belong to the respective authors, academic societies, or publishers/issuers, and these rights are protected by the Japanese Copyright Act. When quoting the content, please follow the Japanese copyright act.

Bis(4-Methyl-2-thiazolyl)guanidines. Preparation and Physicochemical Properties.*

Reiko YODA and Yoshikazu MATSUSHIMA

与田玲子, 松島美一

Our previous studies have shown that 2-thiazolylthioureas are potentially useful chelating agents for spectrophotometric determination of metal ions. During the course of the studies, we found that the pyrolysis of N-methyl-N'-(4-methyl-2-thiazolyl)-S-methylisothiurea afforded N-methyl-N',N''-bis(4-methyl-2-thiazolyl)guanidine (1). Similarly the pyrolytic product of N-ethyl-N'-(4-methyl-2-thiazolyl)-S-methylisothiurea was N-ethyl-N',N''-bis(4-methyl-2-thiazolyl)guanidine (2). For the identification of the compounds, they were prepared separately by the reaction of N,N'-bis(4-methyl-2-thiazolyl)-S-methylisothiurea with methylamine or ethylamine. Use of other mono- or di-substituted amines in the place of methylamine or ethylamine in the reaction gave N-mono- or N,N-disubstituted analogs of 1 and 2. This provides a means of facile synthesis of N,N'-bis(2-thiazolyl)guanidines.

Since there are many guanidine derivatives of biological and medical interests, we prepared eighteen bis(4-methyl-2-thiazolyl)guanidines by the reaction. Compounds 1 and 2 were reported previously and other sixteen guanidines have not been described in the literature.

The ultraviolet, infrared, ^1H - and ^{13}C -nuclear magnetic resonance and mass spectra of the guanidines were measured and analyzed. The results supported the proposed structures.

* 本報告は *Heterocycles*, **26**, 2887–2894 (1987) に発表.