

This article was downloaded by:

On: 30 January 2011

Access details: *Access Details: Free Access*

Publisher *Taylor & Francis*

Informa Ltd Registered in England and Wales Registered Number: 1072954 Registered office: Mortimer House, 37-41 Mortimer Street, London W1T 3JH, UK



Phosphorus, Sulfur, and Silicon and the Related Elements

Publication details, including instructions for authors and subscription information:

<http://www.informaworld.com/smpp/title~content=t713618290>

SYNTHESIS AND PHYSICAL PROPERTIES OF 4-AZA-1,2-DITHIACYCLOHEXANE-5-ONES

Salo Gronowitz^a; Zev Lidert^a

^a Division of Organic Chemistry 1, Chemical Center, University of Lund, Lund, Sweden

To cite this Article Gronowitz, Salo and Lidert, Zev(1979) 'SYNTHESIS AND PHYSICAL PROPERTIES OF 4-AZA-1,2-DITHIACYCLOHEXANE-5-ONES', *Phosphorus, Sulfur, and Silicon and the Related Elements*, 6: 1, 113

To link to this Article: DOI: 10.1080/03086647908080330

URL: <http://dx.doi.org/10.1080/03086647908080330>

PLEASE SCROLL DOWN FOR ARTICLE

Full terms and conditions of use: <http://www.informaworld.com/terms-and-conditions-of-access.pdf>

This article may be used for research, teaching and private study purposes. Any substantial or systematic reproduction, re-distribution, re-selling, loan or sub-licensing, systematic supply or distribution in any form to anyone is expressly forbidden.

The publisher does not give any warranty express or implied or make any representation that the contents will be complete or accurate or up to date. The accuracy of any instructions, formulae and drug doses should be independently verified with primary sources. The publisher shall not be liable for any loss, actions, claims, proceedings, demand or costs or damages whatsoever or howsoever caused arising directly or indirectly in connection with or arising out of the use of this material.

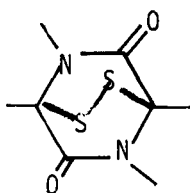
SYNTHESIS AND PHYSICAL PROPERTIES OF 4-AZA-1,2-DITHIACYCLOHEXANE-5-ONES

Salo Gronowitz and Zev Lidert

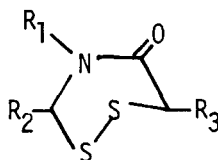
Division of Organic Chemistry 1, Chemical Center, University of Lund,
P.O. Box 740, S-220 07 Lund, Sweden

The epidithiopiperazinedione structure I, a common functionality in the natural products of the gliotoxin-sporidesmin class of compounds is believed to be responsible for the antiviral activity which this class possesses.

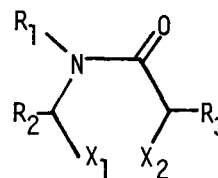
We became therefore interested in studying the monocyclic system 4-aza-1,2-dithiacyclohexane-5-ones (II) which as far as we know hitherto has not been described in the literature. Key intermediates for the synthesis of II are compounds of type III and different routes to III will be discussed.



I



II



III

From III, compounds II were obtained by reaction with potassium thioacetate followed by acid hydrolysis and oxidation with iodine. Spectral data and reduction potentials for II will be discussed.