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## 5-TRIFLUOROMETHYL-1,3-DITHIA-2,4,6-TRIAZINES

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Recently we reported the preparation of 1,3-dichloro-5-trifluoromethyl-1,3-dithia-2,4,6-triazine 1 from CF3CN and  $(NSC1)_31$ .

 $3 \text{ CF}_3\text{CN} + 2 (\text{NSC1})_3 \longrightarrow 3(\text{CF}_3\text{CN}) (\text{NSC1})_2 (\underline{1})$ 

Under carefully controlled conditions  $\underline{l}$  is formed in high yields without by-products. Chlorine is readily exchanged by silylamines:

1 +	MeʒSi-N=S=N-SiMeʒ	$\longrightarrow$	CF3CN5S3 ( <u>2</u> ) + 2 Me3SiCl
<u>1</u> +	Me3Si-N=S(R2)=N-SiMe3	>	$CF_3CN_5S_3R_2(3) + 2 Me_3SiC1$
			$3a - c R_2 = Et_2, (-CH_2-)4, \{F_2\}$
1 +	D=C[N(CH3)SiMe3]2	>	$\overline{CF_3CN_3S_2(NCH_3)_2CO(4)} + 2 \text{ Me3SiCl}$
<u>1</u> +	2 Me3SiN(CH3)2	>	$CF_3CN_3S_2(NMe_2)_2(5) + 2 Me_3SiCl$

Reduction of 1 with Zn in SO2 or with Ph3Sb in CC14 will give 6:

 $1 + Ph_3Sb$   $\longrightarrow$  (CF\_3CN\_3S\_2)<sub>n</sub> (6) + Ph\_3SbCl\_2

MS-data for <u>6</u> suggest the presence of dimers, similar to the recently described phenyl-derivative<sup>2</sup>). <u>6</u> is very reactive: halogens, (CF<sub>3</sub>)<sub>2</sub>NO, etc. are readily added; with XeF<sub>2</sub>, CF<sub>3</sub>CN<sub>2</sub>S<sub>2</sub>F<sub>2</sub> is formed in high yield. The structures ( <u>2</u> and <u>5</u> (M. Noltemeyer, G.M. Sheldrick, Universität Göttingen, FRG) are described and some bonding aspects of these systems are discussed.



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