Short Communications

Contributions intended for publication under this heading should be expressly so marked; they should not exceed about 1000 *words; they should be forwarded in the usual way to the appropriate Co-editor; they will be published as speedily as possible. Publication will be quicker if the contributions are without illustrations.*

Acta Cryst. (1971). B27, 2035

The unit-cell dimensions and space group of *N,N'*-diacetyl-2-thioperhydrodiazepine and of imidazoline-2-thioglycollic acid hydrochloride.

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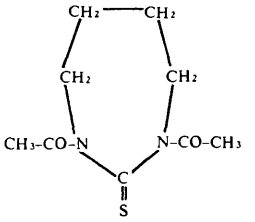
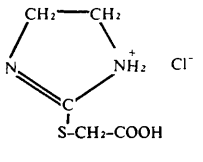
(*Received* 14 *April* 1971)

Crystals of *N,N'*-diacetyl-2-thioperhydrodiazepine and of imidazoline-2-thioglycollic acid hydrochloride have been examined by X-rays. They crystallize in the monoclinic system, space group *Ia*, and in the tetragonal system, space group $I4_1/a$, respectively.

In the course of investigations of structures of thioamides, cyclic thioureines and related compounds (Del Pra, 1967; Del Pra, Di Bello & Mammi, 1967; Mammi, Del Pra & Di Bello, 1967; Mammi, D'Angeli & Bezzi, 1965) *N,N'*-diacetyl-2-thioperhydrodiazepine (I) and the imidazoline-2-thioglycollic acid hydrochloride (II) have been examined by X-rays.



(I)



(II)

Compound (I) was prepared by acetylation of 2-thioperhydrodiazepine with acetic anhydride under various conditions (Di Bello, Giormani & D'Angeli, 1967) while compound (II) was obtained by refluxing an aqueous solution of ethylenethiourea with an excess of chloroacetic acid (Johnson & Edens, 1942).

Single crystals of both compounds were grown from ethanol solution as colourless prisms.

From Weissenberg and precession photographs of zero and upper layers the crystal symmetry and the unit-cell dimensions of the two compounds were determined.

The crystal densities were measured by flotation in water–potassium iodide for (I) and in carbon tetrachloride–benzene for (II). All the unit cells chosen proved to be reduced (Buerger, 1957). The physical and crystallographic data are reported in Table 1. No further work is contemplated.

Table 1. *Crystallographic data*

	(I)	(II)
	$C_9H_{14}O_2SN_2$	$C_5H_8O_2SN_2$
M.W.	214·3	160·2
m.p. (°C)	106	225
Crystal system	monoclinic	tetragonal
Space group	*Ia**	$I4_1/a$
a (Å)	8·98 ± 0·01	20·82 ± 0·02
b (Å)	11·29 ± 0·01	–
c (Å)	10·53 ± 0·01	7·08 ± 0·01
β (°)	99·4 ± 0·2	–
V (Å^3)	1084	3070
D_x (g.cm^{-3})	1·31	1·39
D_m (g.cm^{-3})	1·34	1·37
Z	4	16
F(000) (e)	456	1344
Cu $K\alpha$ (cm^{-1})	18·4	23·2
Mo $K\alpha$ (cm^{-1})	2·1	2·6
Elongation direction	[100]	[001]

The $I2/a$ space group has been rejected on the basis of chemical considerations.

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