

Table 1. *Crystallographic data*

	<i>a</i> (Å)	<i>b</i> (Å)	<i>c</i> (Å)	β (°)	Mols/ unit cell	Density (g.cm. ⁻³)		Space group
						Obs.	Calc.	
Ammonium aminedisulphonate NH(SO ₃ NH ₄) ₂	12.72	3 × 7.74 = 23.2	7.49	92.8	12	2.00	1.90	—
Potassium aminedisulphonate NH(SO ₃ K) ₂	12.43	7.46	7.18	91.2	4	2.49	2.47	<i>C</i> 2/ <i>c</i>
Rubidium aminedisulphonate NH(SO ₃ Rb) ₂	12.80	5 × 7.68 = 38.4	7.45	91.9	20	3.00	3.12	—
Ammonium methanedisulphonate CH ₂ (SO ₃ NH ₄) ₂	12.70	7.85	7.65	92.6	4	1.83	1.63	<i>C</i> 2/ <i>c</i>
Potassium methanedisulphonate CH ₂ (SO ₃ K) ₂	12.55	7.75	7.30	90.5	4	2.37	2.37	<i>C</i> 2/ <i>c</i>

The accuracy of the above cell dimensions is about 0.05 Å, except for potassium aminedisulphonate for which it is about 0.01 Å.

bidium aminesulphonates also have structures very closely similar to that of the potassium salt, but extremely weak layer lines on *b*-axis photographs show that these two salts have superstructures of respectively three and five times the unit-cell volume of the potassium salt.

The results of a detailed three-dimensional analysis of potassium aminedisulphonate will be published separately (with Prof. G. A. Jeffrey).

I am grateful to Prof. E. G. Cox for suggesting this

investigation and to the British Rayon Research Association for financial support.

References

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The unit cell and space group of the complex tridipyridyl-nickel sulfate. By G. JACOBS, *Laboratorium voor Kristalkunde, Rozier 6, Gent, Belgium* and F. SPEEKE, *Laboratorium voor Analytische Chemie, Universiteit Gent, Belgium*

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The complex tridipyridyl-nickel sulfate, which is isomorphous with the analogous copper salt, has the formula Ni($\alpha\alpha'$ dip.)₃SO₄·7H₂O. Jaeger & Van Dyck (1938) found that it forms prismatic monoclinic crystals with

$$a:b:c = 1.547:1:0.908, \beta = 97^\circ 52'.$$

We have made rotation diagrams round the *b* and *c* axes and equi-inclination Weissenberg photographs of the levels *h*0*l*, *h*1*l*, *h**k*0 and *h**k**l*. As no faces of the zone [100] are developed, the determination of *a* had to be made

from the central lattice line spacing of zero-layer Weissenberg photographs.

The cell dimensions are

$$a = 22.90, b = 14.19, c = 24.80 \text{ Å}; \beta = 117^\circ 3'.$$

As is seen in Fig. 1, the X-ray cell is not identical with the morphological cell. The *b* axis, perpendicular to the plane of the paper, is twice as large in the morphological cell as in the X-ray cell.

The density, determined by flotation, was 1.45 g.cm.⁻³, requiring eight formula weights per unit cell. Systematic extinctions were found in the reflexions *h*00, 0*k*0, 00*l* when *k*, *l* respectively are odd. No reflexions were observed for *h**k**l* when *h*+*k* is odd, indicating a *C* end-centred lattice. These absences characterize the space groups *Cc* and *C*2/*c*; in view of the external symmetry we propose

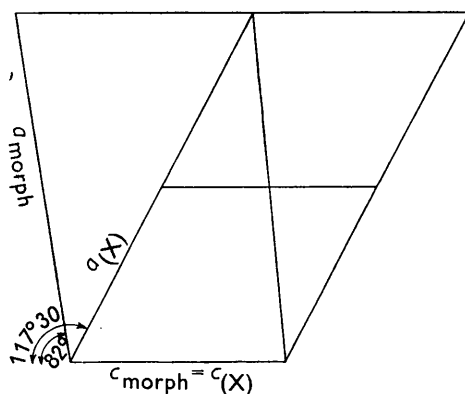


Fig. 1.

Table 1. *Powder-pattern data*

<i>d_{hkl}</i>	<i>I</i>	<i>d_{hkl}</i>	<i>I</i>
11.11	10	3.65	9
9.09	1	3.33	1
7.27	3	3.03	1
6.55	10	2.81	2
5.59	3	2.52	4
5.14	6	2.31	1
4.61	2	2.10	3
4.34	8	1.84	2
4.02	8		

the space group $C2/c$. Table 1 gives the powder-pattern d_{hkl} values and visual estimate of their relative intensities. The powder photographs were obtained with Ni-filtered $Cu K\alpha$ radiation.

We wish to thank Prof. J. Gillis, Prof. W. Dekeyser and Dr S. Amelinckx for their interest and helpful

discussions. This work was sponsored by the Union Minière du Haut Katanga, to which we express our thanks.

Reference

JAEGER, F. M. & VAN DYCK, J. A. (1938). *Z. anorg. Chem.* **227**, 273.

Acta Cryst. (1955). **8**, 68

Ethanolamine hydrogen *d*-tartrate: optical properties and X-ray diffraction data: correction.

By E. G. STEWARD, *Research Laboratories of The General Electric Company, Wembley, England*

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In a recent note (Steward, 1952), the density of ethanolamine hydrogen *d*-tartrate was incorrectly given as 5.51 g.cm.^{-3} and I am indebted to Mr G. J. Bullen (University College, London) for drawing my attention to this.

The correct density is 1.51 g.cm.^{-3} and this suggests two molecules in the unit cell. However, the latter would give a calculated density of 1.39 g.cm.^{-3} , but if one molecule of water is present, the calculated density would be 1.51 g.cm.^{-3} .

Moore & Bryden (1954) have also drawn attention to this error and have shown that one molecule of water is in fact present.

References

- MOORE, D. W. & BRYDEN, J. H. (1954). *Acta Cryst.* **7**, 602.
STEWART, E. G. (1952). *Acta Cryst.* **5**, 390.

Notes and News

Announcements and other items of crystallographic interest will be published under this heading at the discretion of the Editorial Board. Copy should be sent direct to the British Co-editor (R. C. Evans, Crystallographic Laboratory, Cavendish Laboratory, Cambridge, England).

Assistant Editor of *Structure Reports*

In order to reduce the delay in the appearance of the outstanding volumes of *Structure Reports*, the Executive Committee have decided to appoint a full-time Assistant Editor for a limited period. The salary will be in the range £500 to £650 per annum. Further details may be obtained from the General Editor (A. J. C. Wilson, University College, Cardiff, Great Britain), to whom applications for the post should be addressed.

Commission on *Structure Reports*

The Executive Committee has adopted the recommendation of the Commission on *Structure Reports* that Professor J. Wyart (France) should be co-opted on to the Commission and appointed Editor for the Section on Inorganic Compounds as from Volume 14 for 1951. Professor Wyart has accepted this appointment.

Société française de Minéralogie et de Cristallographie

The Société française de Minéralogie et de Cristallographie has marked the 75th anniversary of its foundation in 1878 by the publication in its *Bulletin* of a series of

specially commissioned articles designed to draw attention to the principal scientific aspects of mineralogy and crystallography and to emphasize the practical importance, in a wide range of applications, of studies based on the atomic structure of matter.

In introductory articles R. Hocart reviews the history of the Society, and H. Longchambon and J. Ortel survey the relationships between mineralogy and other sciences. These introductory articles are followed by some seventy more specialized contributions divided into the following chapters:

1. Modern ideas on the structure of matter.
2. The industrial applications of crystallography.
3. Modern aspects of theoretical crystallography.
4. Mineralogy, geochemistry, petrography and metallography.
5. Experimental methods.
6. Mineral studies.

Although the articles have already been published by the Society (*Bull. Soc. franç. Minér.* (1954), **77**, 1-1146) they are also available separately and may be obtained from the publishers (Librairie Masson, 120 Boulevard Saint-Germain, Paris VI, France). The price is 3000 francs in paper wrappers (two volumes bound separately) or 3500 francs in cloth (two volumes bound together).