

Acta Cryst. (1963). **16**, 1074

Crystallographic data for cinchomeric acid and its hydrochloride. By P. J. F. GRIFFITHS,*
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(Received 9 May 1963)

The crystallographic data listed below were obtained from oscillation and Weissenberg photographs (Cu $K\alpha$ radiation). The densities were determined by flotation, a mixture of carbon tetrachloride and dibromoethane being used. Brief notes on the appearance of the crystals and the space-group determinations are given in the text. The maximum error in the cell dimensions and observed densities is of the order of 1%, and the interaxial angle is accurate to within 1°.

Cinchomeric acid (pyridine-3,4-dicarboxylic acid),
 $C_7H_5NO_4$

The crystals used were fine needles elongated along [001]. The Laue symmetry is mmm and the space group is determined uniquely as $P2_12_12_1$ by the systematic absences. The unit-cell dimensions are:

$$a = 11.2, b = 11.2, c = 5.3 \text{ \AA.}$$

$$D_m = 1.68 \text{ g.cm}^{-3}, D_x = 1.67 \text{ g.cm}^{-3} \text{ for } Z = 4.$$

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Cinchomeric acid hydrochloride, C₇H₅NO₄·HCl

This compound was prepared by dissolving cinchomeric acid in 2*N* hydrochloric acid and allowing the solution to crystallize. The crystals obtained were washed, and recrystallized from water as transparent parallelepipeds. The crystals become powdery after a few days exposure to air. The Laue symmetry is $2/m$ and the space group is determined uniquely as $P2_1/c$ by the systematic absences. The unit-cell dimensions are:

$$a = 7.4, b = 7.6, c = 14.6 \text{ \AA; } \beta = 99.5^\circ.$$

$$D_m = 1.63 \text{ g.cm}^{-3}, D_x = 1.66 \text{ g.cm}^{-3} \text{ for } Z = 4.$$

The axial ratios (0.97:1:1.9) and β angle agree, within the limits of their accuracy, with those quoted by Groth (1919, vol. 5, p. 692) (0.9584:1:?: 99.75°).

Reference

GROTH, P. (1919). *Chemische Kristallographie*. Leipzig: Engelmann.

Notes and News

Announcements and other items of crystallographic interest will be published under this heading at the discretion of the Editorial Board. The notes (in duplicate) should be sent to the General Secretary of the International Union of Crystallography (D. W. Smits, Mathematisch Instituut, University of Groningen, Reithdiepskade 4, Groningen, The Netherlands). Publication of an item in a particular issue cannot be guaranteed unless the draft is received 8 weeks before the date of publication.

Conference on Solid State Physics

The Institute of Physics and The Physical Society are arranging a conference to be held at the H. H. Wills Physics Laboratory, University of Bristol, England, from 1 to 4 January 1964. There will be invited lectures on the Fermi surface, the Mössbauer effect, and defects in solids; and contributed papers on semiconductors, spin resonance, as well as other topics. The closing date for abstracts of contributed papers is 15 November, and for registration for the conference 22 November.

Further details and application forms are obtainable from the Administration Assistant, The Institute of

Physics and The Physical Society, 47 Belgrave Square, London S.W. 1, England.

List of films available for teaching purposes

A second edition of this list has been compiled by the members of the I. U. Cr. Commission on Crystallographic Teaching. The list contains information concerning 74 films, and the names and addresses of 32 distributors. Copies of the list can be obtained from the secretary of the Commission: H. CURIEN, Laboratoire de Minéralogie-Cristallographie, Faculté des Sciences, 1 rue Victor-Cousin, Paris V, France.