the crystal, while too much may vaporize and condense around the crystal in large drops which will absorb X-rays.

Finally, the part of the capillary containing the crystal is wrapped with wet filter paper, and the tube is sealed in a micro flame (Fig. 1(*h*)). The only precautions which we have found necessary with the completed mount (Fig. 1(*i*)) are those against crushing, drafts (which may produce distillation of the mother liquor and surround the crystal with drops of condensate), and mechanical shocks (which may dislodge the crystal).

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Unit cell constants of ethanolamine hydrogen *d*-tartrate monohydrate.*

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Previous work by Steward (1952) indicated the unit cell constants of ethanolamine hydrogen *d*-tartrate as follows:

$a_0 = 8{\cdot}83 \pm 0{\cdot}03$, $b_0 = 7{\cdot}51 \pm 0{\cdot}03$, $c_0 = 7{\cdot}60 \pm 0{\cdot}03$ Å; $\beta = 92°$.
$N = 8$.
Density (calc.): 5·57 g.cm.$^{-3}$.
Density (obs.): 5·51 g.cm.$^{-3}$ (18° C.).
Space group: C_2^2–$P2_1$.

The unusually high density reported for this compound prompted us to check these results. The salt was prepared by evaporation of an equimolal solution of ethanolamine and *d*-tartaric acid in 50% water–ethanol. Crystals thus obtained were eight-sided prisms, of the monoclinic sphenoidal class elongated along the crystallographic *b* axis. They exhibited the pinacoids {100}, {101}, {001}, and {10$\bar{1}$}, and were terminated by sphenoids {110}, {1$\bar{1}$0} and {0$\bar{1}$1}. Goniometric measurements of a typical crystal are shown in Fig. 1.

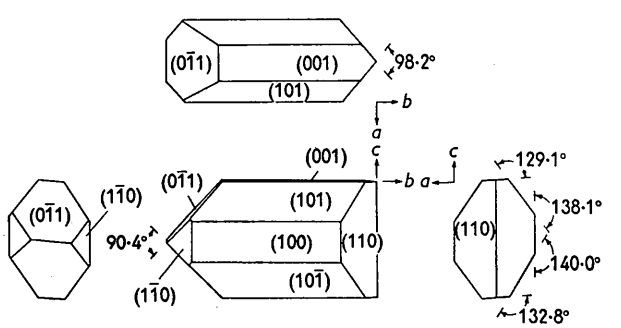

Fig. 1. Crystal habit.

The density of these crystals, as determined by the sink–float method in carbon tetrachloride–toluene, was 1·52 g.cm.$^{-3}$ at 25° C.

Single-crystal rotation and Weissenberg patterns were made using nickel-filtered Cu $K\alpha$ radiation. Measurements of these photographs yielded the following unit-cell data:

$a_0 = 8{\cdot}75 \pm 0{\cdot}03$, $b_0 = 7{\cdot}47 \pm 0{\cdot}02$, $c_0 = 7{\cdot}58 \pm 0{\cdot}02$ Å; $\beta = 92°\ 40' \pm 10'$.
$N = 2$.
Density (calc.): 1·538 g.cm.$^{-3}$.
Space group: C_2^2–$P2_1$.

The molecular weight calculated from these data is 229·2, which corresponds to the monohydrated salt. That this is actually the case was demonstrated by preparing the anhydrous material. Heating at 105° C. for 1 hr. resulted in a weight loss of 7·83% (theoretical, 7·86%), representing one mole of water. Powder patterns of the two compounds were run with nickel-filtered Cu $K\alpha$ radiation, using a recording diffractometer, and are summarized in Table 1. The anhydrous material slowly picked up moisture from the air on standing and reverted to the monohydrate.

Table 1. *Powder diagrams*

Ethanolamine hydrogen *d*-tartrate monohydrate		Ethanolamine hydrogen *d*-tartrate, anhydrous	
d (Å)	I/I_0	*d* (Å)	I/I_0
8·83	0·11	7·82	0·39
7·55	0·06	6·70	0·22
5·90	0·41	5·37	0·36
5·56	0·16	5·06	0·06
5·33	0·32	4·30	0·22
4·66	0·12	3·72	1·00
4·39	0·21	3·61	0·71
3·89	0·38	3·47	0·38
3·80	1·00	3·34	0·06
3·73	0·16	3·27	0·25
3·56	0·10	3·16	0·07
3·46	0·14	3·11	0·09
3·42	0·17	3·07	0·12
3·33	0·47	3·02	0·10
3·22	0·14	2·89	0·09
3·11	0·09	2·82	0·06
2·94	0·10	2·62	0·21
2·85	0·18	2·57	0·10
2·79	0·46	2·54	0·09
2·73	0·10	2·48	0·10
2·67	0·20	2·42	0·25
2·62	0·20	2·36	0·12
2·39	0·29	2·33	0·13
2·31	0·08	2·30	0·12

* This note is published with the approval of the Technical Director, U.S. Naval Ordnance Test Station.

Reference

Steward, E. G. (1952). *Acta Cryst.* **5**, 390.