

where  $V$  is the crystal volume, have been determined, together with their standard deviations. In some cases, due to the shortness ( $\lesssim 1$  cm) of the largest specimen available, only an average value of  $a$  can be used, namely

$$a' = \frac{1}{V_0} \left( \frac{\Delta V}{\Delta P} \right)_T \quad \text{at 7 kb}$$

and  $b$  values are unreliable. For the sake of comparison some values of  $a'$  are quoted in the table in cases where this restriction does not apply. It is felt that if a longer pressure vessel were built and longer specimens of the more compressible alkali halides were obtained ( $\sim 5$  cm) then it should be possible to achieve accuracies of about 0.1% in the value of  $a$  and 1% in the value of  $b$  using this technique.

The results obtained with the different specimens of potassium chloride show that trace impurities do not have disproportionate effects on the compressibility. Thus it is unlikely that differences in the purity of the specimens used can account for more than a small part of the spread in the results obtained by various authors. The results obtained here for the values of  $a$  and  $b$  lie within the range defined by previous workers in every case.

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