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## Thermodynamic properties of uvarovite garnet (Ca<sub>3</sub>Cr<sub>2</sub>Si<sub>3</sub>O<sub>12</sub>) S. KLEMME,<sup>1,\*</sup> J.C. VAN MILTENBURG,<sup>2</sup> P. JAVORSKY,<sup>3,4</sup> AND F. WASTIN<sup>3</sup>

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## ABSTRACT

The low-temperature heat capacity of uvarovite  $(Ca_3Cr_2Si_3O_{12})$  was measured between 2 and 400 K, and thermochemical functions were derived from the results. The measured heat-capacity curve shows a significant lambda-shaped anomaly peaking at around 9 K. The nature of this transition is unknown. From our data, we suggest a standard entropy for uvarovite at 298.15 K of  $320.9 \pm 0.6 \text{ J/(mol·K)}$ .