The Magnetic and Thermal Properties of the Intermetallic Compound MnHg
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Abstract

The magnetic susceptibility and the specific heat of powdered specimens of the intermetallic compounds with the compositions of MnHg and Mn$_2$Hg$_5$ were measured from the boiling point of liquid air up to 400°K. The thermomagnetic curve showed a break at about 200°K for MnHg. A peak was found in the specific heat vs. temperature curve at 198.5°K, which corresponded to the breaking point in the susceptibility. From the amount of this anomalous heat absorption, the anomaly might not be attributed to the transition from the antiferromagnetic to the paramagnetic state. The magnetization curve for MnHg at the liquid air temperature changed a slope at about 13 KOe. An interpretation is given for the findings mentioned above.