

in Figure 6.

Dysprosium

The reaction product diagram for Dy + 2 Sb is shown in figure 7.

At pressures below about 40 kilobars and temperatures above 900 °C cubic DySb plus Sb were obtained. At lower temperatures lines of DySb plus unknown products, type I, were observed. The LaSb₂ type orthorhombic structure was not found in this system. The high pressure orthorhombic structure observed in GdSb₂ and TbSb₂ was obtained at pressures above about 40 kilobars and temperatures above 500 °C. A region where only the reactants were obtained was found at pressures between 40 and 50 kilobars for temperatures above 1700 °C similar to the region found in the Tb + 2 Sb system.

Holmium

The reaction product diagram for Ho + 2 Sb is very similar to that obtained for Dy + 2 Sb and is shown in Figure 8. At pressures below 40 kilobars and temperatures above 700 to 800 °C cubic HoSb plus Sb were obtained. At lower temperatures HoSb plus unknown product, type I, similar to that observed with Gd, Tb and Dy were found. The high pressure orthorhombic phase was observed at pressures above 45 kilobars and temperatures from 500 to about 1700 °C. The region where only reactants were found