O-Sn (Oxygen-Tin)

H. Okamoto

The partial Sn-O phase diagram (0-66.7 at.% O) in [Massalski2] was redrawn from [Hansen], which is based on [1949Spa]. Two intermediate phases, Sn_3O_4 and SnO_2 , were shown. In addition, [1974Moh] reported the existence of SnO, which is formed by a (βSn) + $Sn_3O_4 \rightarrow SnO$ peritectoid reaction at 270 °C.

Based on these experimental phase boundary data and available information on thermodynamic properties of this system, [2003Cah] calculated the Sn-O phase diagram. The result is shown in Fig. 1.

References

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Fig. 1 Sn-O phase diagram