

Solidus and Liquidus Temperatures of Zr-2.5% Nb

Discussion

No data have been found for the solidus and liquid temperatures of Zr-2.5% Nb. The IBRAE Material Property Database on the world wide web and in the Russian Academy of Sciences Nuclear Safety Institute (IBRAE) report by Ozrin et al. [1] recommend 2133 K for the solidus and liquidus of Zr-2.5% Nb. The Russian International Nuclear Safety Center review [2] of the IBRAE report concurred with this value, which is based on other Russian reviews [3,4]. The recommended values for the solidus and liquidus temperatures of Zr-1%Nb are respectively, 2100 K and 2110 K. These values are from subsecond heating measurements of the solidus temperature and the indirect determination the liquidus temperature of Zr-1%Nb reported by Peletsky and Petrova in 1997 [5].

References

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