

# Electrical Conductivity of Molten Binary $\text{NdBr}_3$ – Alkali Bromide Mixtures

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Electrical conductivity of liquid binary  $\text{NdBr}_3$  – alkali metal bromide mixtures was measured as a function of temperature over the whole composition range. Prior to these measurements,  $\text{NdBr}_3$  and alkali bromides were reinvestigated: a new assessment of literature data was made because of the discrepancy with reference values on  $\text{NdBr}_3$ ,  $\text{LiBr}$  and  $\text{CsBr}$ . The classical Arrhenius equation describes well our electrical conductivity data for mixtures. These results are discussed in terms of complex formation in the melts.

*Key words:* Electrical Conductivity; Neodymium Bromide;  $\text{NdBr}_3$ ; Alkali Bromide.