

Electrical Conductivity of Molten LaBr_3 and LaBr_3 – MBr Binary Mixtures

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The electrical conductivity of liquid binary LaBr_3 -alkali metal bromide mixtures was measured as function of the temperature over the whole composition range. Prior to these measurements, LaBr_3 was reinvestigated because of the discrepancies in the literature values. The classical Arrhenius equation did not stand for any individual mixture. These results were discussed in terms of complex formation in the melts.

Key words: Lanthanum(III) Bromide; Alkali Metal Bromides; Electrical Conductivity; Activation Energy; Complex Formation.