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SUBJECT: MEASUREMENT OF THE VISCOSITY
OF COMPOSITION 70
TO: Distribution
FROM: S. I. Cohen and T. N. Jones

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MEASUREMENT OF THE VISCOSITY OF COMPOSITION 70

Viscosity measurements were made on Composition 70 ($\text{NaF-ZrF}_4\text{-UF}_4$; 56-39-5 Mol %) and the viscosity was found to vary from about 8.1 cp at 600°C to about 3.6 cp at 800°C. The viscosity may be represented throughout this temperature range by

$$\mu = 0.1045e^{3798/T^\circ\text{K}}$$

Measurements were made with a Brookfield viscometer and two capillary viscometers and the values yielded by all three instruments were in good agreement (see Figure 1). Measurements were made on a sample of salt from batch EE 415 PF.

The viscosity of this mixture is 10-15% lower than the viscosity of Composition 30. This slight improvement in viscosity was unexpected in view of the density and composition similarities of the two mixtures.

S. I. Cohen

T. N. Jones

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Fig. 1. Viscosity of Composition 70.
(NaF-ZrF₄-UF₄; 56-39-5 Mol %)

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