**Sorption Systems Consortium - SSC**

- **BACKGROUND**
  For a number of years the transport property data of aqueous lithium bromide has been scattered about with different designers, engineers and manufacturers using different numbers for the viscosity and thermal conductivity. This confusion was the basis for this project of reconciling the transport properties of aqueous lithium bromide.

  The optimization of the absorption process can be performed more accurately when the viscosity and thermal conductivity of the working fluid, aqueous lithium bromide, are well known.

  Currently there is not an abundance of transport property data, therefore the more experimental work is needed to fill in gaps and confirm existing limited data sets.

- **UMCP SOLUTION**
  Transport property correlations set have been developed. These correlations predict the viscosity and thermal conductivity of aqueous lithium bromide.

- **BENEFITS**
  The viscosity and thermal conductivity play a major role in the behavior of the absorption process. Therefore with the validated transport properties of aqueous lithium bromide, designers, engineers and manufacturers will be able to understand better and increase the process performance.

- **PROJECT STATUS (August, 1997)**
  Various data sets of the transport properties of aqueous lithium bromide have been compiled and a transport property correlation set has been developed. This correlation set provides the viscosity and thermal conductivity of aqueous lithium bromide as a function of temperature and mass fraction. The correlation is programmed in two languages for easy accessibility (QuickBASIC and EES).

- **FUTURE WORK**
  The process of validating and refining the correlations will continue. Additional features will be added to allow modeling of extreme conditions. The validated correlations will be distributed to the SSC members for comment.

- **FOR FURTHER INFORMATION:**
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