

MixtureDB, a Thermophysical Property Database

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Measured data are essential to process knowledge, process modelling and to selection of strategies for solving process design problems. They also form the basis of property models. Indeed, data is of key importance, when performing almost any task in Computer-Aided Process Engineering. A trend in recent years has been that corporations sell subscriptions to large collections of data that are updated as new data appear. Such subscriptions are expensive and inflexible for the needs of educational institutions or small industrial engineering R & D groups. The MixtureDB database containing thermophysical properties of pure substances and mixtures is presented. Stored properties are: phase equilibria (vapor-liquid, liquid-liquid, solid-liquid), vapor pressures, critical data, caloric properties such as heat capacities, enthalpies and entropies and densities. The article gives an overview about the contents of the DETHERM database, access options and the features of the retrieval software package.