

DIPPR Evaluated Process Design Database

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Since 1980, the Design Institute for Physical Properties® has sponsored Project 801 with the goal to develop and maintain a critically evaluated compilation of thermophysical properties of important industrial chemicals. Four foundational principles: industrial sponsor control, critical evaluation, consistency, and completeness, have guided the development of the database. The effectiveness and thoroughness of the implementation of these principles have been substantially enhanced by new methods and tools developed since Project 801 moved to Brigham Young University in January of 1998. In addition to these improvements, which principally impact the quality of the database through the input and evaluation activities of the project, several tools and functionalities, which enhance the usability of the database, have been implemented. The database has been transferred to a relational-database format (using Access® 97), which greatly enhances viewing and data-retrieval capabilities. Also, a Windows-based interface for the database, called DIADEM, which is an acronym for DIPPR Information and Data Evaluation Manager, has been developed. DIADEM has powerful and convenient search, display, graphing, and comparison capabilities, and includes a broad suite of property prediction methods. The relational database and DIADEM will be demonstrated.