Thermo-physical
Fluid Properties

AFT Chempak Suite™ 2

Make Fluid Property Data Availability as Dynamic as Your Analyses

- Chempak™ Property Database
- AFT Chempak Plus™
- AFT Chempak Suite™

The Chempak Property Database can be purchased separately. If you already own the Database, you can purchase AFT Chempak Plus (includes AFT Chempak Viewer™ and AFT Chempak Add-in™ for Excel™). You can also get the full AFT Chempak Suite (includes Database, Viewer and Add-in).
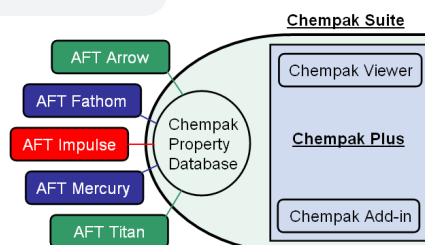
Properties:

- Bulk Modulus of Elasticity
- Compressibility Factor
- Critical Pressure
- Critical Temperature Density
- Enthalpy
- Entropy
- Internal Energy
- Isentropic Expansion Coefficient, Gamma
- Kinematic Viscosity
- Molecular Weight Phase
- Prandtl Number
- Pressure Quality
- Saturation Pressure
- Saturation Temperature
- Sonic Velocity
- Specific Heat, cp
- Specific Heat, cv
- Specific Volume
- Surface Tension
- Temperature Superheat /Subcooled
- Temperature
- Thermal Conductivity
- Viscosity
- Volume Expansivity

Chempak Property Database

- Provides comprehensive thermo-physical properties on a wide range of fluids to AFT's family of software products
- Provides data on ~700 fluids for AFT Fathom™, AFT Impulse™ and AFT Mercury™ with the ability to assemble non-reacting static mixtures
- Provides data on ~600 gases for AFT Arrow™ and AFT Titan™ with the ability to model both static mixtures and dynamic mixing resulting from intersecting flow streams
- Fluids listed by up to 3 commonly used names
- Fluids listed by formula and chemical structure
- Sort on any of the identifiers

Dynamic solutions for a fluid world ™

AFT
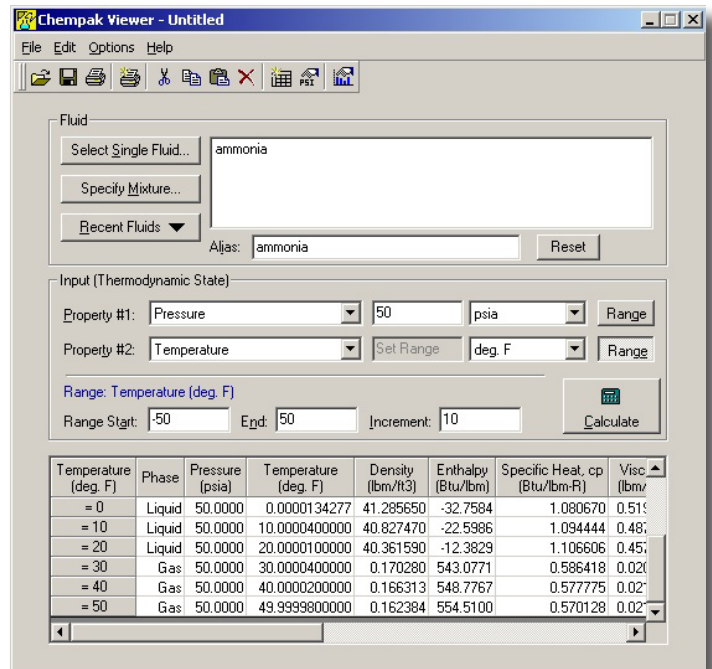Applied Flow Technology

AFT Chempak Viewer

Access the Chempak Property Database as a stand-alone application

- Assemble non-reacting mixtures on a mass or mole basis
- Calculate fluid or mixture properties for any combination of the available input parameters as a single point, two point or a range of inputs
- Save or set your parameter and unit preferences as the default
- Save and reload input sets
- Save fluid and mixture sets for quick recall using the Recent Fluids list
- Specify a name for any fluid or mixture and it appears along with the standard Chempak name
- Change units 'on the fly' by double-clicking an output column header
- Input parameters:
  - Density
  - Enthalpy
  - Entropy
  - Internal Energy
  - Pressure
  - Quality
  - Saturated Liquid
  - Saturated Vapor
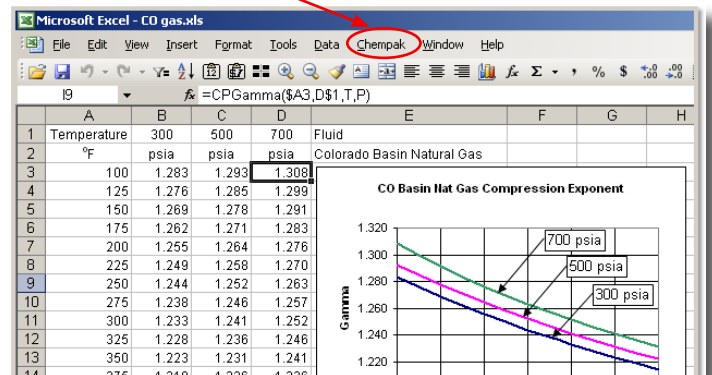 - Specific Volume
  - Temperature

Output

- Chempak Viewer provides both text and graphical output
- Configure displayed parameters, display order and units
- Supports English and SI units
- Export as a PDF file or to a spreadsheet for additional calculations
- Select a portion of the output and paste into a spreadsheet
- Customize your graphs using colors, axis scale, titles, markers and more
- Use your graphs in other documents

AFT Chempak Add-in menu in Excel

AFT Chempak Add-in (for Excel)

Directly access Chempak fluid property functions from within a Microsoft Excel spreadsheet

- Imbed comprehensive, accurate fluid properties in your spreadsheet based calculations
- Paste or directly enter Chempak functions as you would with any Excel function
- Fluid selection, assembling mixtures, unit preferences and online help are available from the Chempak menu that appears on Excel's menu bar