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).



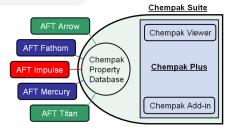
Properties:

- 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 [™]

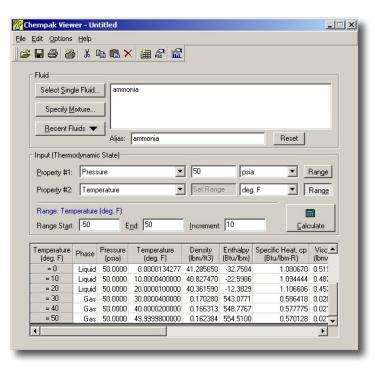
AFT Chempak Viewer

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 🔍

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Microsoft Excel - CO gas.xls					
🗐 Eile Edit View Insert Format Tools Data Chempak Window Help					
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19 ▼ fx =CPGamma(\$A3,D\$1,T,P)					
	A	В	С	D	E F G H
1	Temperature	300	500	700	Fluid
2	°F	psia	psia	psia	Colorado Basin Natural Gas
3	100	1.283	1.293	1.308	
4	125	1.276	1.285	1.299	CO Basin Nat Gas Compression Exponent
5	150	1.269	1.278	1.291	
6	175	1.262	1.271	1.283	1.320
7	200	1.255	1.264	1.276	1.300
8	225	1.249	1.258	1.270	
9	250	1.244	1.252	1.263	g 1.280
10	275	1.238	1.246	1.257	300 psia
11	300	1.233	1.241	1.252	5
12	325	1.228	1.236	1.246	1.240
13	350	1.223	1.231	1.241	1.220
1.4	375	1 210	1 226	1 3 3 6	

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



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"AFT Fathom","AFT Arrow","AFT Impluse", "AFT Mercury","AFT Titan", "AFT Chempak Viewer","AFT Chempak Add-in", "Chempak Suite","Chempak Plus", "Applied Flow Technology", "Dynamic solutions for a fluid world" and the AFT logo are trademarks of Applied Flow Technology Corporation. "Chempak" is a trademark of Madison Technical Software Inc. Excel is a trademark of Microsoft.