[DIPPR (Design Institute for Physical Property Data)](#)

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The DIPPR file contains textual information and pure component numeric physical property data for over 1700 commercially important chemicals and substances. The data included in the file are compiled and evaluated as a project of the Design Institute for Physical Property Data (DIPPR) of the American Institute of Chemical Engineers (AIChE).

The numeric data in the DIPPR File consist of 29 single value property constants and 15 temperature-dependent properties. Regression equations and coefficients for temperature-dependent properties are also given for calculating additional property values. All of the data are searchable, including Regression Coefficients, percent error, and minimum/maximum temperature values.

If experimental data are not available, values are estimated when possible. Temperature-dependent correlation coefficients, applicable upper and lower temperature limits, and values computed at these limits are included for temperature-dependent properties.

Properties Included (1700 commercially important chemicals and substances):

Fixed-value properties:

1. Molecular weight
2. Critical temperature
3. Critical pressure
4. Critical volume
5. Critical compressibility factor
6. Melting point (at 1 atm)
7. Triple point temperature
8. Triple point pressure
9. Normal boiling point
10. Liquid Molar Volume at 25° C
11. Enthalpy of formation of ideal gas at 25° C
12. Gibbs energy of formation of ideal gas at 25° C
13. Absolute entropy of ideal gas at 25° C
14. Enthalpy of formation in standard state at 25° C
15. Gibbs energy of formation in standard state at 25° C
16. Absolute entropy in standard state at 25° C
17. Enthalpy of fusion at melting point
18. Standard enthalpy of combustion at 25° C
19. Acentric Factor
20. Radius of gyration
21. Solubility parameter at 25° C
22. Dipole moment
23. van der Waals volume
24. van der Waals area
25. Refractive Index
26. Flash point
27. Lower flammability limit
28. Upper flammability limit
29. Autoignition temperature

Correlation identification and temperature-dependent correlation coefficients:

1. Solid density (when appropriate)
2. Liquid density
3. Solid vapor pressure (when appropriate)
4. Vapor pressure
5. Enthalpy of vaporization (at saturation pressure)
6. Solid heat capacity (when appropriate)
7. Liquid heat capacity
8. Ideal gas heat capacity
9. Second virial coefficient
10. Liquid viscosity
11. Vapor viscosity
12. Solid thermal conductivity (when appropriate)
13. Liquid thermal conductivity
14. Vapor thermal conductivity
15. Surface tension