

# N,N-Difluorobenzylamine

**InChI:** InChI=1S/C7H7F2N/c8-10(9)6-7-4-2-1-3-5-7/h1-5H,6H2

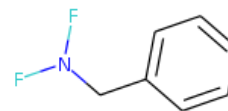
**InChI Key:** QSSYZZLBAAQNKO-UHFFFAOYSA-N

**Formula:** C7H7F2N

**SMILES:** FN(F)Cc1ccccc1

**Molecular Weight:** 143.13

**CAS:** 23162-99-4



## Physical Properties

Property	Value	Unit	Source
$\Delta_c H^\circ_{\text{liquid}}$	-4076.00 $\pm$ 3.00	kJ/mol	NIST Webbook
$\Delta_f G^\circ$	-158.37	kJ/mol	Joback Method
$\Delta_f H^\circ_{\text{gas}}$	7.00 $\pm$ 4.00	kJ/mol	NIST Webbook
$\Delta_f H^\circ_{\text{liquid}}$	-37.00 $\pm$ 3.00	kJ/mol	NIST Webbook
$\Delta_{\text{fus}} H^\circ$	17.11	kJ/mol	Joback Method
$\Delta_{\text{vap}} H^\circ$	44.00 $\pm$ 1.00	kJ/mol	NIST Webbook
$\log P_{\text{oct/wat}}$	2.26		Crippen Method
$P_c$	3668.65	kPa	Joback Method
$T_{\text{boil}}$	397.22	K	Joback Method
$T_c$	583.72	K	Joback Method
$T_{\text{fus}}$	228.72	K	Joback Method
$V_c$	0.37	m <sup>3</sup> /kg-mol	Joback Method

## Temperature Dependent Properties

Property	Value	Unit	Temperature (K)	Source
$C_{p,\text{gas}}$	181.99	J/mol $\times$ K	397.22	Joback Method

Property	Value	Unit	Temperature (K)	Source
$\Delta_{\text{vap}} H$	77.80	kJ/mol	323.0	NIST Webbook

## Sources

**Joback Method:** [https://en.wikipedia.org/wiki/Joback\\_method](https://en.wikipedia.org/wiki/Joback_method)

**NIST Webbook:** [http://webbook.nist.gov/cgi/inchi/InChI=1S/C7H7F2N/c8-10\(9\)6-7-4-2-1-3-5-7/h1-5H,6H2](http://webbook.nist.gov/cgi/inchi/InChI=1S/C7H7F2N/c8-10(9)6-7-4-2-1-3-5-7/h1-5H,6H2)

**Crippen Method:** <http://pubs.acs.org/doi/abs/10.1021/ci9903071>

## Legend

$\Delta_c H^\circ_{\text{liquid}}$ : Standard liquid enthalpy of combustion (kJ/mol).

$C_{p,\text{gas}}$ : Ideal gas heat capacity (J/mol×K).

$\Delta_f G^\circ$ : Standard Gibbs free energy of formation (kJ/mol).

$\Delta_f H^\circ_{\text{gas}}$ : Enthalpy of formation at standard conditions (kJ/mol).

$\Delta_f H^\circ_{\text{liquid}}$ : Liquid phase enthalpy of formation at standard conditions (kJ/mol).

$\Delta_{\text{fus}} H^\circ$ : Enthalpy of fusion at standard conditions (kJ/mol).

$\Delta_{\text{vap}} H^\circ$ : Enthalpy of vaporization at standard conditions (kJ/mol).

$\Delta_{\text{vap}} H$ : Enthalpy of vaporization at a given temperature (kJ/mol).

$\log P_{\text{oct/wat}}$ : Octanol/Water partition coefficient .

$P_c$ : Critical Pressure (kPa).

$T_{\text{boil}}$ : Normal Boiling Point Temperature (K).

$T_c$ : Critical Temperature (K).

$T_{\text{fus}}$ : Normal melting (fusion) point (K).

$V_c$ : Critical Volume (m<sup>3</sup>/kg-mol).

Latest version available from:

<https://www.cheméo.com/cid/11-350-0/N%2CN-Difluorobenzylamine>

Generated by Cheméo on Tue, 30 Nov 2021 05:32:16 +0000.

**Cheméo** (<https://www.cheméo.com>) is the biggest free database of chemical and physical data for the process industry.