

methan-d3-amine

Inchi: InChI=1S/CH5N/c1-2/h2H2,1H3/i1D3
InchiKey: BAVYZALUXZFZLV-FIBGUPNXSA-N
Formula: CH2D3N
SMILES: CN
Mol. weight [g/mol]: 34.08
CAS: 5581-55-5

Physical Properties

Property code	Value	Unit	Source
gf	23.99	kJ/mol	Joback Method
hf	-30.18	kJ/mol	Joback Method
hfus	3.54	kJ/mol	Joback Method
hvap	28.46	kJ/mol	Joback Method
log10ws	0.32		Crippen Method
logp	-0.425		Crippen Method
mcvol	34.930	ml/mol	McGowan Method
pc	6328.92	kPa	Joback Method
tb	294.81	K	Joback Method
tc	475.82	K	Joback Method
tf	184.29	K	Joback Method
vc	0.120	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	49.72	J/mol×K	294.81	Joback Method
cpg	53.29	J/mol×K	324.98	Joback Method
cpg	56.74	J/mol×K	355.15	Joback Method
cpg	60.08	J/mol×K	385.32	Joback Method
cpg	63.31	J/mol×K	415.48	Joback Method
cpg	66.43	J/mol×K	445.65	Joback Method
cpg	69.45	J/mol×K	475.82	Joback Method

Sources

Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307I
Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws
Joback Method:	https://en.wikipedia.org/wiki/Joback_method
McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C5581555&Units=SI

Legend

cpg:	Ideal gas heat capacity
gf:	Standard Gibbs free energy of formation
hf:	Enthalpy of formation at standard conditions
hfus:	Enthalpy of fusion at standard conditions
hvap:	Enthalpy of vaporization at standard conditions
log10ws:	Log10 of Water solubility in mol/l
logp:	Octanol/Water partition coefficient
mcvol:	McGowan's characteristic volume
pc:	Critical Pressure
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume

Latest version available from:

<https://www.chemeo.com/cid/29-519-4/methan-d3-amine.pdf>

Generated by Cheméo on 2025-12-22 13:08:16.174430897 +0000 UTC m=+6157093.704471567.

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