

Cyclohexanamine, 3-methyl-, trans-

Inchi:	InChI=1S/C7H15N/c1-6-3-2-4-7(8)5-6/h6-7H,2-5,8H2,1H3/t6-,7-/m1/s1
InchiKey:	JYDYHSHPBDRPU-RNFRBKRXSA-N
Formula:	C7H15N
SMILES:	CC1CCCC(N)C1
Mol. weight [g/mol]:	113.20
CAS:	1193-17-5

Physical Properties

Property code	Value	Unit	Source
gf	91.25	kJ/mol	Joback Method
hf	-120.04	kJ/mol	Joback Method
hfus	11.99	kJ/mol	Joback Method
hvap	41.94	kJ/mol	Joback Method
log10ws	-1.95		Crippen Method
logp	1.524		Crippen Method
mcvol	108.610	ml/mol	McGowan Method
pc	3624.61	kPa	Joback Method
tb	424.70	K	NIST Webbook
tc	664.51	K	Joback Method
tf	255.05	K	Joback Method
vc	0.389	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	233.34	J/molxK	446.97	Joback Method
cpg	250.45	J/molxK	483.23	Joback Method
cpg	266.69	J/molxK	519.48	Joback Method
cpg	282.07	J/molxK	555.74	Joback Method
cpg	296.61	J/molxK	591.99	Joback Method
cpg	310.34	J/molxK	628.25	Joback Method
cpg	323.26	J/molxK	664.51	Joback Method

Pressure Dependent Properties

Property code	Value	Unit	Pressure [kPa]	Source
tbrp	345.70	K	6.70	NIST Webbook

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C1193175&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
Crippen Method:	https://www.cheméo.com/doc/models/crippen_log10ws
Joback Method:	https://en.wikipedia.org/wiki/Joback_method

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
tbrp:	Boiling point at reduced pressure
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume

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