

Cyclohexanol,2-(dimethylamino)-,trans-

Inchi:	InChI=1S/C8H17NO/c1-9(2)7-5-3-4-6-8(7)10/h7-8,10H,3-6H2,1-2H3/t7-,8-/m0/s1
InchiKey:	UFUVLAQFZSUWHR-YUMQZZPRSA-N
Formula:	C8H17NO
SMILES:	CN(C)C1CCCCC1O
Mol. weight [g/mol]:	143.23
CAS:	15910-74-4

Physical Properties

Property code	Value	Unit	Source
gf	7.18	kJ/mol	Joback Method
hf	-259.17	kJ/mol	Joback Method
hfus	16.49	kJ/mol	Joback Method
hvap	52.24	kJ/mol	Joback Method
ie	8.36	eV	NIST Webbook
log10ws	-1.12		Crippen Method
logp	0.852		Crippen Method
mcvol	128.570	ml/mol	McGowan Method
pc	3364.54	kPa	Joback Method
tb	501.94	K	Joback Method
tc	689.99	K	Joback Method
tf	276.35	K	Joback Method
vc	0.453	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	309.31	J/molxK	501.94	Joback Method
cpg	325.21	J/molxK	533.28	Joback Method
cpg	340.33	J/molxK	564.62	Joback Method
cpg	354.68	J/molxK	595.96	Joback Method
cpg	368.29	J/molxK	627.30	Joback Method
cpg	381.18	J/molxK	658.64	Joback Method
cpg	393.36	J/molxK	689.99	Joback Method

Sources

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=C15910744&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l

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
ie:	Ionization energy
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

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