

Cyclohexane, 1-decyl-2-methyl, trans

Inchi:	InChI=1S/C17H34/c1-3-4-5-6-7-8-9-10-14-17-15-12-11-13-16(17)2/h16-17H,3-15H2,1-2H
InchiKey:	VVIPGXSGFRNNAW-IAGOWNOFSAN
Formula:	C17H34
SMILES:	CCCCCCCCC1CCCC1C
Mol. weight [g/mol]:	238.45

Physical Properties

Property code	Value	Unit	Source
gf	109.00	kJ/mol	Joback Method
hf	-360.23	kJ/mol	Joback Method
hfus	32.69	kJ/mol	Joback Method
hvap	53.56	kJ/mol	Joback Method
log10ws	-6.35		Crippen Method
logp	6.344		Crippen Method
mcvol	239.530	ml/mol	McGowan Method
pc	1394.37	kPa	Joback Method
rinsol	1740.00		NIST Webbook
tb	603.24	K	Joback Method
tc	784.96	K	Joback Method
tf	284.49	K	Joback Method
vc	0.919	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	662.67	J/molxK	603.24	Joback Method
cpg	768.03	J/molxK	754.68	Joback Method
cpg	749.04	J/molxK	724.39	Joback Method
cpg	729.03	J/molxK	694.10	Joback Method
cpg	707.99	J/molxK	663.81	Joback Method
cpg	685.88	J/molxK	633.53	Joback Method
cpg	786.03	J/molxK	784.96	Joback Method
dvisc	0.0001694	Paxs	603.24	Joback Method
dvisc	0.0002255	Paxs	550.12	Joback Method

dvisc	0.0003192	Paxs	496.99	Joback Method
dvisc	0.0004910	Paxs	443.87	Joback Method
dvisc	0.0008489	Paxs	390.74	Joback Method
dvisc	0.0017440	Paxs	337.62	Joback Method
dvisc	0.0046878	Paxs	284.49	Joback Method

Sources

Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci9903071
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=R553743&Units=SI

Legend

cpg:	Ideal gas heat capacity
dvisc:	Dynamic viscosity
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
rinpol:	Non-polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume

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