

Cyclohexane, 1,3,5-trimethyl-2-octadecyl-

Other names:	1,3,5-Trimethyl-4-n-octadecylcyclohexane 2,4,6-Trimethyl-1-n-octadecylcyclohexane
Inchi:	InChI=1S/C27H54/c1-5-6-7-8-9-10-11-12-13-14-15-16-17-18-19-20-21-27-25(3)22-24(2)
InchiKey:	SLYADMRXVMOLJY-UHFFFAOYSA-N
Formula:	C27H54
SMILES:	CCCCCCCCCCCCCCCCCCC1C(C)CC(C)CC1C
Mol. weight [g/mol]:	378.72
CAS:	55282-34-3

Physical Properties

Property code	Value	Unit	Source
gf	177.78	kJ/mol	Joback Method
hf	-607.31	kJ/mol	Joback Method
hfus	60.73	kJ/mol	Joback Method
hvap	75.20	kJ/mol	Joback Method
log10ws	-10.05		Crippen Method
logp	9.956		Crippen Method
mvol	380.430	ml/mol	McGowan Method
pc	728.88	kPa	Joback Method
tb	822.70	K	Joback Method
tc	1008.82	K	Joback Method
tf	388.71	K	Joback Method
vc	1.478	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1289.57	J/molxK	822.70	Joback Method
cpg	1315.24	J/molxK	853.72	Joback Method
cpg	1339.45	J/molxK	884.74	Joback Method
cpg	1362.24	J/molxK	915.76	Joback Method
cpg	1383.66	J/molxK	946.78	Joback Method
cpg	1403.75	J/molxK	977.80	Joback Method
cpg	1422.55	J/molxK	1008.82	Joback Method

dvisc	0.0017138	Paxs	388.71	Joback Method
dvisc	0.0006956	Paxs	461.04	Joback Method
dvisc	0.0003606	Paxs	533.37	Joback Method
dvisc	0.0002187	Paxs	605.71	Joback Method
dvisc	0.0001475	Paxs	678.04	Joback Method
dvisc	0.0001074	Paxs	750.37	Joback Method
dvisc	0.0000827	Paxs	822.70	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=C55282343&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
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/77-253-6/Cyclohexane-1-3-5-trimethyl-2-octadecyl.pdf>

Generated by Cheméo on 2024-04-19 19:20:20.844662355 +0000 UTC m=+15843669.765239666.

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