

Cyclohexane, 1,1'-dodecylidenebis[4-methyl-

Other names:	1,1-Di(4-methylcyclohexyl)dodecane Cyclohexane, 1,1'-dodecylidenebis*4-methyl- 1,1-bis(4-methylcyclohexyl)dodecane
Inchi:	InChI=1S/C26H50/c1-4-5-6-7-8-9-10-11-12-13-26(24-18-14-22(2)15-19-24)25-20-16-23(
InchiKey:	ARDIJKGJYOGVEO-UHFFFAOYSA-N
Formula:	C26H50
SMILES:	CCCCCCCCCCCC(C1CCC(C)CC1)C1CCC(C)CC1
Mol. weight [g/mol]:	362.68
CAS:	55334-09-3

Physical Properties

Property code	Value	Unit	Source
gf	199.08	kJ/mol	Joback Method
hf	-517.29	kJ/mol	Joback Method
hfus	45.38	kJ/mol	Joback Method
hvap	73.32	kJ/mol	Joback Method
log10ws	-9.29		Crippen Method
logp	9.176		Crippen Method
mcvol	355.480	ml/mol	McGowan Method
pc	884.72	kPa	Joback Method
tb	823.60	K	Joback Method
tc	1022.38	K	Joback Method
tf	238.00 ± 3.00	K	NIST Webbook
vc	1.349	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1356.96	J/mol×K	1022.38	Joback Method
cpg	1223.41	J/mol×K	823.60	Joback Method
cpg	1249.73	J/mol×K	856.73	Joback Method
cpg	1274.35	J/mol×K	889.86	Joback Method
cpg	1297.33	J/mol×K	922.99	Joback Method
cpg	1318.72	J/mol×K	956.12	Joback Method

cpg	1338.58	J/molxK	989.25	Joback Method
dvisc	0.0000710	Paxs	823.60	Joback Method
dvisc	0.0029307	Paxs	374.06	Joback Method
dvisc	0.0009397	Paxs	448.98	Joback Method
dvisc	0.0004172	Paxs	523.91	Joback Method
dvisc	0.0002269	Paxs	598.83	Joback Method
dvisc	0.0001413	Paxs	673.75	Joback Method
dvisc	0.0000968	Paxs	748.68	Joback Method
hvapt	93.50	kJ/mol	502.00	NIST Webbook

Sources

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=C55334093&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci9903071
Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws

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
hvapt:	Enthalpy of vaporization at a given temperature
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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