Cyclohexane, 1,1'-tetradecylidenebis-

Other names: 1,1-Dicyclohexyltetradecane
Inchi: InChI=1S/C26H50/c1-2-3-4-5-6-7-8-9-10-11-18-23-26(24-19-14-12-15-20-24)25-21-16-13
InchiKey: COJYJGCWESKHMR-UHFFFAOYSA-N
Formula: C26H50
SMILES: CCCCCCCCCCCCCC(C1CCCCC1)C1CCCCC1
Mol. weight [g/mol]: 362.68
CAS: 55334-08-2

Physical Properties

Property code	Value	Unit	Source
gf	214.50	kJ/mol	Joback Method
hf	-476.61	kJ/mol	Joback Method
hfus	43.24	kJ/mol	Joback Method
hvap	73.94	kJ/mol	Joback Method
log10ws	-9.77		Crippen Method
logp	9.464		Crippen Method
mcvol	355.480	ml/mol	McGowan Method
pc	920.50	kPa	Joback Method
tb	832.94	K	Joback Method
tc	1032.60	K	Joback Method
tf	310.80 ± 4.00	K	NIST Webbook
vc	1.351	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1218.96	J/mol×K	832.94	Joback Method
cpg	1244.47	J/mol×K	866.22	Joback Method
cpg	1268.36	J/mol×K	899.49	Joback Method
cpg	1290.70	J/mol×K	932.77	Joback Method
cpg	1311.55	J/mol×K	966.04	Joback Method
cpg	1331.00	J/mol×K	999.32	Joback Method
cpg	1349.10	J/mol×K	1032.60	Joback Method
dvisc	0.0031936	Pa×s	382.54	Joback Method

dvisc	0.0008654	Pa×s	457.61	Joback Method
dvisc	0.0003388	Pa×s	532.67	Joback Method
dvisc	0.0001672	Pa×s	607.74	Joback Method
dvisc	0.0000964	Pa×s	682.81	Joback Method
dvisc	0.0000620	Pa×s	757.87	Joback Method
dvisc	0.0000432	Pa×s	832.94	Joback Method
hvapt	97.70	kJ/mol	511.00	NIST Webbook

Correlations

Information	Value
Property code	pvap
Equation	ln(Pvp) = A + B/(T + C)
Coeff. A	1.28499e+01
Coeff. B	-4.75314e+03
Coeff. C	-1.29954e+02
Temperature range (K), min.	508.32
Temperature range (K), max.	760.48

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=C55334082&Units=SI

The Yaws Handbook of Vapor Pressure: https://www.sciencedirect.com/book/9780128029992/the-yaws-handbook-of-vapor-pressure

Crippen Method: http://pubs.acs.org/doi/abs/10.1021/ci990307l

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
pvap:	Vapor pressure
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume