Cyclohexane, 2-(1-decylundecyl)-1,4-dimethyl-

Other names: 11-(2,5-Dimethylcyclohexyl)heneicosane
Inchi: InChI=1S/C29H58/c1-5-7-9-11-13-15-17-19-21-28(29-25-26(3)23-24-27(29)4)22-20-18-1
InchiKey: UPYOZECJBFFKFT-UHFFFAOYSA-N
Formula: C29H58
SMILES: CCCCCCCCCCC(CCCCCCCCCC)C1CC(C)CCC1C
Mol. weight [g/mol]: 406.77
CAS: 55429-27-1

Physical Properties

Property code	Value	Unit	Source
gf	199.89	kJ/mol	Joback Method
hf	-633.53	kJ/mol	Joback Method
hfus	61.32	kJ/mol	Joback Method
hvap	79.57	kJ/mol	Joback Method
log10ws	-10.89		Crippen Method
logp	10.736		Crippen Method
mcvol	408.610	ml/mol	McGowan Method
pc	672.90	kPa	Joback Method
tb	872.69	K	Joback Method
tc	1068.43	K	Joback Method
tf	400.49	K	Joback Method
vc	1.585	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1421.60	J/mol×K	872.69	Joback Method
cpg	1536.45	J/mol×K	1035.81	Joback Method
cpg	1516.43	J/mol×K	1003.18	Joback Method
cpg	1494.99	J/mol×K	970.56	Joback Method
cpg	1472.08	J/mol×K	937.94	Joback Method
cpg	1447.64	J/mol×K	905.31	Joback Method
cpg	1555.11	J/mol×K	1068.43	Joback Method
dvisc	0.0000453	Pa×s	872.69	Joback Method

dvisc	0.0000616	Pa×s	793.99	Joback Method
dvisc	0.0000896	Pa×s	715.29	Joback Method
dvisc	0.0001431	Pa×s	636.59	Joback Method
dvisc	0.0002607	Pa×s	557.89	Joback Method
dvisc	0.0005786	Pa×s	479.19	Joback Method
dvisc	0.0017563	Pa×s	400.49	Joback Method

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=C55429271&Units=SI
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
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