Nonadecane, 2,6,10,14,18-pentamethyl-

Other names: 2,6,10,14,18-Pentamethylnonadecane
Inchi: InChI=1S/C24H50/c1-20(2)12-8-14-22(5)16-10-18-24(7)19-11-17-23(6)15-9-13-21(3)4/h2
InchiKey: OJXBLWMIJXWKQV-UHFFFAOYSA-N
Formula: C24H50
SMILES: CC(C)CCCC(C)CCCC(C)CCCC(C)CCCC(C)C
Mol. weight [g/mol]: 338.65
CAS: 55191-61-2

Physical Properties

Property code	Value	Unit	Source
gf	139.00	kJ/mol	Joback Method
hf	-565.09	kJ/mol	Joback Method
hfus	40.30	kJ/mol	Joback Method
hvap	67.08	kJ/mol	Joback Method
log10ws	-8.66		Crippen Method
logp	8.888		Crippen Method
mcvol	349.020	ml/mol	McGowan Method
pc	824.79	kPa	Joback Method
rinpol	2105.00		NIST Webbook
rinpol	2105.00		NIST Webbook
rinpol	2106.00		NIST Webbook
rinpol	2110.00		NIST Webbook
rinpol	2105.00		NIST Webbook
rinpol	2105.00		NIST Webbook
rinpol	2141.00		NIST Webbook
rinpol	2103.00		NIST Webbook
rinpol	2108.00		NIST Webbook
rinpol	2108.00		NIST Webbook
rinpol	2143.00		NIST Webbook
rinpol	2140.00		NIST Webbook
tb	746.32	K	Joback Method
tc	920.04	K	Joback Method
tf	285.24	K	Joback Method
vc	1.349	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1089.39	J/mol×K	746.32	Joback Method
cpg	1112.87	J/mol×K	775.27	Joback Method
cpg	1135.23	J/mol×K	804.23	Joback Method
cpg	1156.52	J/mol×K	833.18	Joback Method
cpg	1176.77	J/mol×K	862.13	Joback Method
cpg	1196.02	J/mol×K	891.09	Joback Method
cpg	1214.32	J/mol×K	920.04	Joback Method
dvisc	0.0151599	Pa×s	285.24	Joback Method
dvisc	0.0019455	Pa×s	362.09	Joback Method
dvisc	0.0005124	Pa×s	438.93	Joback Method
dvisc	0.0002008	Pa×s	515.78	Joback Method
dvisc	0.0001004	Pa×s	592.63	Joback Method
dvisc	0.0000588	Pa×s	669.47	Joback Method
dvisc	0.0000385	Pa×s	746.32	Joback Method

Sources

Crippen Method: http://pubs.acs.org/doi/abs/10.1021/ci990307l
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=C55191612&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