16-Heptatricosene, 25-methyl

Inchi: InChI=1S/C38H76/c1-4-6-8-10-12-14-16-17-18-19-20-21-22-23-24-25-26-27-29-31-33-35
InchiKey: UGCYHMJKWCKGTR-OCOZRVBESA-N
Formula: C38H76
SMILES: CCCCCCCCCCCCCCCC=CCCCCCCCC(C)CCCCCCCCCCC
Mol. weight [g/mol]: 533.01

Physical Properties

Property code	Value	Unit	Source
gf	346.86	kJ/mol	Joback Method
hf	-715.71	kJ/mol	Joback Method
hfus	90.86	kJ/mol	Joback Method
hvap	99.75	kJ/mol	Joback Method
log10ws	-15.34		Crippen Method
logp	14.702		Crippen Method
mcvol	541.980	ml/mol	McGowan Method
pc	432.94	kPa	Joback Method
rinpol	3696.00		NIST Webbook
rinpol	3696.00		NIST Webbook
tb	1072.56	K	Joback Method
tc	1385.66	K	Joback Method
tf	497.94	K	Joback Method
vc	2.138	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	2007.56	J/mol×K	1072.56	Joback Method
cpg	2045.43	J/mol×K	1124.74	Joback Method
cpg	2080.66	J/mol×K	1176.93	Joback Method
cpg	2113.68	J/mol×K	1229.11	Joback Method
cpg	2144.88	J/mol×K	1281.30	Joback Method
cpg	2174.70	J/mol×K	1333.48	Joback Method
cpg	2203.55	J/mol×K	1385.66	Joback Method
dvisc	0.0003678	Pa×s	497.94	Joback Method

dvisc	0.0001039	Pa×s	593.71	Joback Method
dvisc	0.0000417	Pa×s	689.48	Joback Method
dvisc	0.0000209	Pa×s	785.25	Joback Method
dvisc	0.0000122	Pa×s	881.02	Joback Method
dvisc	0.0000079	Pa×s	976.79	Joback Method
dvisc	0.0000055	Pa×s	1072.56	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=R608556&Units=SI
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

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