Tritriacontane, 15,19-dimethyl-

Other names: 15,19-Dimethyltritriacontane
Inchi: InChI=1S/C35H72/c1-5-7-9-11-13-15-17-19-21-23-25-27-30-34(3)32-29-33-35(4)31-28-2
InchiKey: LZEZYWWNVXRCEZ-UHFFFAOYSA-N
Formula: C35H72
SMILES: CCCCCCCCCCCCCCC(C)CCCC(C)CCCCCCCCCCCCCC
Mol. weight [g/mol]: 492.95
CAS: 56987-80-5

Physical Properties

Property code	Value	Unit	Source
gf	238.94	kJ/mol	Joback Method
hf	-776.29	kJ/mol	Joback Method
hfus	79.36	kJ/mol	Joback Method
hvap	92.73	kJ/mol	Joback Method
log10ws	-13.99		Crippen Method
logp	13.611		Crippen Method
mcvol	504.010	ml/mol	McGowan Method
pc	480.50	kPa	Joback Method
rinpol	3355.00		NIST Webbook
rinpol	3343.00		NIST Webbook
rinpol	3350.00		NIST Webbook
rinpol	3355.00		NIST Webbook
rinpol	3345.00		NIST Webbook
rinpol	3344.00		NIST Webbook
tb	999.32	K	Joback Method
tc	1260.43	K	Joback Method
tf	454.21	K	Joback Method
vc	1.984	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1825.56	J/mol×K	999.32	Joback Method
cpg	1858.31	J/mol×K	1042.84	Joback Method

cpg	1888.72	J/mol×K	1086.36	Joback Method
cpg	1916.96	J/mol×K	1129.87	Joback Method
cpg	1943.25	J/mol×K	1173.39	Joback Method
cpg	1967.79	J/mol×K	1216.91	Joback Method
cpg	1990.77	J/mol×K	1260.43	Joback Method
dvisc	0.0007702	Pa×s	454.21	Joback Method
dvisc	0.0001994	Pa×s	545.06	Joback Method
dvisc	0.0000760	Pa×s	635.91	Joback Method
dvisc	0.0000368	Pa×s	726.76	Joback Method
dvisc	0.0000210	Pa×s	817.62	Joback Method
dvisc	0.0000134	Pa×s	908.47	Joback Method
dvisc	0.0000093	Pa×s	999.32	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=C56987805&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