10-Methyldotriacontane

Other names: 12-Methyldotriacontane
Inchi: InChI=1S/C33H68/c1-4-6-8-10-12-14-15-16-17-18-19-20-21-22-24-26-28-30-32-33(3)31-
InchiKey: BWDVOGIYXQHKGC-UHFFFAOYSA-N
Formula: C33H68
SMILES: CCCCCCCCCCCCCCCCCCCCC(C)CCCCCCCCCC
Mol. weight [g/mol]: 464.89
CAS: 58349-83-0

Physical Properties

Property code	Value	Unit	Source
gf	224.54	kJ/mol	Joback Method
hf	-729.73	kJ/mol	Joback Method
hfus	77.70	kJ/mol	Joback Method
hvap	88.66	kJ/mol	Joback Method
log10ws	-13.39		Crippen Method
logp	12.975		Crippen Method
mcvol	475.830	ml/mol	McGowan Method
pc	521.73	kPa	Joback Method
rinpol	3235.00		NIST Webbook
rinpol	3232.00		NIST Webbook
rinpol	3236.00		NIST Webbook
rinpol	3232.00		NIST Webbook
rinpol	3232.00		NIST Webbook
rinpol	3225.00		NIST Webbook
rinpol	3230.00		NIST Webbook
rinpol	3236.00		NIST Webbook
rinpol	3230.00		NIST Webbook
rinpol	3235.00		NIST Webbook
rinpol	3230.00		NIST Webbook
rinpol	3233.70		NIST Webbook
rinpol	3228.00		NIST Webbook
rinpol	3227.00		NIST Webbook
rinpol	3228.00		NIST Webbook
rinpol	3235.00		NIST Webbook
rinpol	3235.00		NIST Webbook
rinpol	3225.00		NIST Webbook
tb	954.00	K	Joback Method

tc	1190.48	K	Joback Method
tf	446.67	K	Joback Method
vc	1.877	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1687.02	J/mol×K	954.00	Joback Method
cpg	1820.84	J/mol×K	1151.07	Joback Method
cpg	1797.49	J/mol×K	1111.65	Joback Method
cpg	1772.57	J/mol×K	1072.24	Joback Method
cpg	1745.95	J/mol×K	1032.83	Joback Method
cpg	1717.48	J/mol×K	993.41	Joback Method
cpg	1842.77	J/mol×K	1190.48	Joback Method
dvisc	0.0000140	Pa×s	954.00	Joback Method
dvisc	0.0000199	Pa×s	869.44	Joback Method
dvisc	0.0000305	Pa×s	784.89	Joback Method
dvisc	0.0000519	Pa×s	700.34	Joback Method
dvisc	0.0001021	Pa×s	615.78	Joback Method
dvisc	0.0002494	Pa×s	531.22	Joback Method
dvisc	0.0008545	Pa×s	446.67	Joback Method

Sources

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=C58349830&Units=SI
Crippen Method: http://pubs.acs.org/doi/abs/10.1021/ci990307l

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