Dotriacontyl ethyl ether

Inchi: InChI=1S/C34H70O/c1-3-5-6-7-8-9-10-11-12-13-14-15-16-17-18-19-20-21-22-23-24-25-2
InchiKey: DMINPCVHMNQHLZ-UHFFFAOYSA-N
Formula: C34H70O
SMILES: CCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCOCC
Mol. weight [g/mol]: 494.92

Physical Properties

Property code	Value	Unit	Source
gf	130.40	kJ/mol	Joback Method
hf	-877.31	kJ/mol	Joback Method
hfus	85.00	kJ/mol	Joback Method
hvap	93.69	kJ/mol	Joback Method
log10ws	-13.14		Crippen Method
logp	12.746		Crippen Method
mcvol	495.790	ml/mol	McGowan Method
pc	494.05	kPa	Joback Method
rinpol	3477.00		NIST Webbook
rinpol	3477.00		NIST Webbook
tb	999.74	K	Joback Method
tc	1267.39	K	Joback Method
tf	495.17	K	Joback Method
vc	1.958	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1791.73	J/mol×K	999.74	Joback Method
cpg	1929.58	J/mol×K	1222.78	Joback Method
cpg	1906.50	J/mol×K	1178.17	Joback Method
cpg	1881.35	J/mol×K	1133.57	Joback Method
cpg	1853.96	J/mol×K	1088.96	Joback Method
cpg	1824.14	J/mol×K	1044.35	Joback Method
cpg	1950.79	J/mol×K	1267.39	Joback Method
dvisc	0.0000096	Pa×s	999.74	Joback Method

dvisc	0.0000134	Pa×s	915.64	Joback Method
dvisc	0.0000200	Pa×s	831.55	Joback Method
dvisc	0.0000327	Pa×s	747.45	Joback Method
dvisc	0.0000606	Pa×s	663.36	Joback Method
dvisc	0.0001342	Pa×s	579.26	Joback Method
dvisc	0.0003895	Pa×s	495.17	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=U406372&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