Propyl triacontyl ether

Inchi: InChI=1S/C33H68O/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: ZUCRQPDEGXGNGF-UHFFFAOYSA-N
Formula: C33H68O
SMILES: CCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCOCCC
Mol. weight [g/mol]: 480.89

Physical Properties

Property code	Value	Unit	Source
gf	121.98	kJ/mol	Joback Method
hf	-856.67	kJ/mol	Joback Method
hfus	82.41	kJ/mol	Joback Method
hvap	91.46	kJ/mol	Joback Method
log10ws	-12.72		Crippen Method
logp	12.356		Crippen Method
mcvol	481.700	ml/mol	McGowan Method
pc	515.83	kPa	Joback Method
rinpol	3374.00		NIST Webbook
rinpol	3374.00		NIST Webbook
tb	976.86	K	Joback Method
tc	1229.09	K	Joback Method
tf	483.90	K	Joback Method
vc	1.901	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1722.96	J/mol×K	976.86	Joback Method
cpg	1856.14	J/mol×K	1187.05	Joback Method
cpg	1833.60	J/mol×K	1145.01	Joback Method
cpg	1809.15	J/mol×K	1102.97	Joback Method
cpg	1782.66	J/mol×K	1060.94	Joback Method
cpg	1753.98	J/mol×K	1018.90	Joback Method
cpg	1876.92	J/mol×K	1229.09	Joback Method
dvisc	0.0000112	Pa×s	976.86	Joback Method

dvisc	0.0000157	Pa×s	894.70	Joback Method
dvisc	0.0000234	Pa×s	812.54	Joback Method
dvisc	0.0000382	Pa×s	730.38	Joback Method
dvisc	0.0000706	Pa×s	648.22	Joback Method
dvisc	0.0001560	Pa×s	566.06	Joback Method
dvisc	0.0004509	Pa×s	483.90	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=U406286&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