Dotriacontyl propyl ether

Inchi: InChI=1S/C35H72O/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: MWWWKXQGVAVEMS-UHFFFAOYSA-N
Formula: C35H72O
SMILES: CCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCOCCC
Mol. weight [g/mol]: 508.95

Physical Properties

Property code	Value	Unit	Source
gf	138.82	kJ/mol	Joback Method
hf	-897.95	kJ/mol	Joback Method
hfus	87.59	kJ/mol	Joback Method
hvap	95.91	kJ/mol	Joback Method
log10ws	-13.56		Crippen Method
logp	13.136		Crippen Method
mcvol	509.880	ml/mol	McGowan Method
pc	473.62	kPa	Joback Method
rinpol	3572.00		NIST Webbook
rinpol	3572.00		NIST Webbook
tb	1022.62	K	Joback Method
tc	1307.47	K	Joback Method
tf	506.44	K	Joback Method
vc	2.014	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1860.76	J/mol×K	1022.62	Joback Method
cpg	2003.63	J/mol×K	1260.00	Joback Method
cpg	1979.96	J/mol×K	1212.52	Joback Method
cpg	1954.07	J/mol×K	1165.05	Joback Method
cpg	1925.72	J/mol×K	1117.57	Joback Method
cpg	1894.69	J/mol×K	1070.10	Joback Method
cpg	2025.29	J/mol×K	1307.47	Joback Method
dvisc	0.0000082	Pa×s	1022.62	Joback Method

dvisc	0.0000114	Pa×s	936.59	Joback Method
dvisc	0.0000171	Pa×s	850.56	Joback Method
dvisc	0.0000280	Pa×s	764.53	Joback Method
dvisc	0.0000519	Pa×s	678.50	Joback Method
dvisc	0.0001153	Pa×s	592.47	Joback Method
dvisc	0.0003357	Pa×s	506.44	Joback Method

Sources

McGowan Method: http://link.springer.com/article/10.1007/BF02311772
NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=U406287&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

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