Butyl dotriacontyl ether

Inchi: InChI=1S/C36H74O/c1-3-5-7-8-9-10-11-12-13-14-15-16-17-18-19-20-21-22-23-24-25-26
InchiKey: ULDDDRQHDDRQOC-UHFFFAOYSA-N
Formula: C36H74O
SMILES: CCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCOCCCC
Mol. weight [g/mol]: 522.97

Physical Properties

Property code	Value	Unit	Source
gf	147.24	kJ/mol	Joback Method
hf	-918.59	kJ/mol	Joback Method
hfus	90.18	kJ/mol	Joback Method
hvap	98.14	kJ/mol	Joback Method
log10ws	-13.98		Crippen Method
logp	13.526		Crippen Method
mcvol	523.970	ml/mol	McGowan Method
pc	454.43	kPa	Joback Method
rinpol	3663.00		NIST Webbook
rinpol	3663.00		NIST Webbook
tb	1045.50	K	Joback Method
tc	1349.48	K	Joback Method
tf	517.71	K	Joback Method
vc	2.070	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1930.04	J/mol×K	1045.50	Joback Method
cpg	2078.27	J/mol×K	1298.82	Joback Method
cpg	2053.98	J/mol×K	1248.16	Joback Method
cpg	2027.29	J/mol×K	1197.49	Joback Method
cpg	1997.93	J/mol×K	1146.83	Joback Method
cpg	1965.61	J/mol×K	1096.16	Joback Method
cpg	2100.44	J/mol×K	1349.48	Joback Method
dvisc	0.0000070	Pa×s	1045.50	Joback Method

dvisc	0.0000097	Pa×s	957.53	Joback Method
dvisc	0.0000146	Pa×s	869.57	Joback Method
dvisc	0.0000239	Pa×s	781.61	Joback Method
dvisc	0.0000444	Pa×s	693.64	Joback Method
dvisc	0.0000989	Pa×s	605.68	Joback Method
dvisc	0.0002889	Pa×s	517.71	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=U406413&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