Decapropylene glycol, monoallyl ether, acetate

Inchi: InChI=1S/C35H68O12/c1-13-14-37-25(2)15-38-26(3)16-39-27(4)17-40-28(5)18-41-29(6)

InchiKey: FZWQJASPROYVMK-UHFFFAOYSA-N

Formula: C35H68O12

SMILES: C=CCOC(C)COC(C)COC(C)COC(C)COC(C)COC(C)COC(C)COC(C)COC(C)COC(C)CC

Mol. weight [g/mol]: 680.91

Physical Properties

Property code	Value	Unit	Source
gf	-976.66	kJ/mol	Joback Method
hf	-2260.10	kJ/mol	Joback Method
hfus	64.56	kJ/mol	Joback Method
hvap	122.21	kJ/mol	Joback Method
log10ws	-5.18		Crippen Method
logp	4.787		Crippen Method
mcvol	565.850	ml/mol	McGowan Method
pc	476.73	kPa	Joback Method
rinpol	3412.00		NIST Webbook
rinpol	3412.00		NIST Webbook
rinpol	3410.00		NIST Webbook
rinpol	3408.00		NIST Webbook
rinpol	3414.00		NIST Webbook
rinpol	3410.00		NIST Webbook
rinpol	3412.00		NIST Webbook
rinpol	3420.00		NIST Webbook
rinpol	3412.00		NIST Webbook
rinpol	3412.00		NIST Webbook
rinpol	3412.00		NIST Webbook
rinpol	3410.00		NIST Webbook
rinpol	3408.00		NIST Webbook
tb	1292.97	K	Joback Method
tc	1766.75	K	Joback Method
tf	626.91	K	Joback Method
vc	2.120	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	2076.60	J/mol×K	1292.97	Joback Method
cpg	1788.68	J/mol×K	1687.79	Joback Method
cpg	1885.83	J/mol×K	1608.83	Joback Method
cpg	1962.62	J/mol×K	1529.86	Joback Method
cpg	2019.63	J/mol×K	1450.90	Joback Method
cpg	2057.44	J/mol×K	1371.93	Joback Method
cpg	1670.59	J/mol×K	1766.75	Joback Method
dvisc	0.0000001	Pa×s	1292.97	Joback Method
dvisc	0.0000002	Pa×s	1181.96	Joback Method
dvisc	0.0000003	Pa×s	1070.95	Joback Method
dvisc	0.0000005	Pa×s	959.94	Joback Method
dvisc	0.0000010	Pa×s	848.93	Joback Method
dvisc	0.0000027	Pa×s	737.92	Joback Method
dvisc	0.0000102	Pa×s	626.91	Joback Method

Sources

McGowan Method: http://link.springer.com/article/10.1007/BF02311772
NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=R151921&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