Nonapropylene glycol, monoallyl ether, acetate

Inchi: InChI=1S/C32H62O11/c1-12-13-34-14-23(2)35-15-24(3)36-16-25(4)37-17-26(5)38-18-27

InchiKey: ICMRTKCPDMQLOQ-UHFFFAOYSA-N

Formula: C32H62O11

SMILES: C=CCOCC(C)OCC(C)OCC(C)OCC(C)OCC(C)OCC(C)OCC(C)OCC(C)OCC(C)OCC(C)OC(C)=O

Mol. weight [g/mol]: 622.83

Physical Properties

Property code	Value	Unit	Source
gf	-894.48	kJ/mol	Joback Method
hf	-2060.68	kJ/mol	Joback Method
hfus	59.13	kJ/mol	Joback Method
hvap	113.51	kJ/mol	Joback Method
log10ws	-4.73		Crippen Method
logp	4.381		Crippen Method
mcvol	517.710	ml/mol	McGowan Method
pc	545.13	kPa	Joback Method
rinpol	3200.00		NIST Webbook
rinpol	3199.00		NIST Webbook
rinpol	3203.00		NIST Webbook
rinpol	3200.00		NIST Webbook
rinpol	3200.00		NIST Webbook
rinpol	3197.00		NIST Webbook
rinpol	3204.00		NIST Webbook
rinpol	3200.00		NIST Webbook
rinpol	3198.00		NIST Webbook
rinpol	3200.00		NIST Webbook
rinpol	3204.00		NIST Webbook
rinpol	3202.00		NIST Webbook
tb	1202.35	K	Joback Method
tc	1569.55	K	Joback Method
tf	585.87	K	Joback Method
vc	1.940	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1895.64	J/mol×K	1202.35	Joback Method
cpg	1898.25	J/mol×K	1263.55	Joback Method
cpg	1891.12	J/mol×K	1324.75	Joback Method
cpg	1874.00	J/mol×K	1385.95	Joback Method
cpg	1846.64	J/mol×K	1447.15	Joback Method
cpg	1808.82	J/mol×K	1508.35	Joback Method
cpg	1760.28	J/mol×K	1569.55	Joback Method
dvisc	0.0000247	Pa×s	585.87	Joback Method
dvisc	0.0000068	Pa×s	688.62	Joback Method
dvisc	0.0000026	Pa×s	791.36	Joback Method
dvisc	0.0000013	Pa×s	894.11	Joback Method
dvisc	0.0000007	Pa×s	996.86	Joback Method
dvisc	0.0000004	Pa×s	1099.60	Joback Method
dvisc	0.0000003	Pa×s	1202.35	Joback Method

Sources

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=R152182&Units=SI
Crippen Method: http://pubs.acs.org/doi/abs/10.1021/ci990307l
Crippen Method: https://www.chemeo.com/doc/models/crippen_log10ws

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