Glycerol - hexapropylene glycol ether, triacetate

Inchi: InChI=1S/C27H50O12/c1-18(10-31-19(2)11-33-21(4)13-35-23(6)15-37-24(7)28)32-12-20

InchiKey: VNXWFVRWZBGCGK-UHFFFAOYSA-N

Formula: C27H50O12

SMILES: CC(=O)OCC(C)OCC(C)OCC(C)OCC(C)OCC(C)OCC(C)OCC(COC(C)=O)OC(C)=O

Mol. weight [g/mol]: 566.68

Physical Properties

Property code	Value	Unit	Source
gf	-1172.38	kJ/mol	Joback Method
hf	-2165.29	kJ/mol	Joback Method
hfus	56.51	kJ/mol	Joback Method
hvap	114.91	kJ/mol	Joback Method
log10ws	-3.02		Crippen Method
logp	2.475		Crippen Method
mcvol	448.830	ml/mol	McGowan Method
pc	723.40	kPa	Joback Method
rinpol	2928.00		NIST Webbook
rinpol	2926.00		NIST Webbook
rinpol	2930.00		NIST Webbook
rinpol	2922.00		NIST Webbook
rinpol	2930.00		NIST Webbook
rinpol	2927.00		NIST Webbook
rinpol	2930.00		NIST Webbook
rinpol	2931.00		NIST Webbook
rinpol	2932.00		NIST Webbook
rinpol	2928.00		NIST Webbook
rinpol	2930.00		NIST Webbook
rinpol	2931.00		NIST Webbook
rinpol	2929.00		NIST Webbook
rinpol	2928.00		NIST Webbook
rinpol	2928.00		NIST Webbook
tb	1177.47	K	Joback Method
tc	1498.11	K	Joback Method
tf	638.91	K	Joback Method
vc	1.685	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1602.50	J/mol×K	1177.47	Joback Method
cpg	1604.35	J/mol×K	1230.91	Joback Method
cpg	1599.34	J/mol×K	1284.35	Joback Method
cpg	1587.27	J/mol×K	1337.79	Joback Method
cpg	1567.94	J/mol×K	1391.23	Joback Method
cpg	1541.17	J/mol×K	1444.67	Joback Method
cpg	1506.75	J/mol×K	1498.11	Joback Method
dvisc	0.0000309	Pa×s	638.91	Joback Method
dvisc	0.0000119	Pa×s	728.67	Joback Method
dvisc	0.0000056	Pa×s	818.43	Joback Method
dvisc	0.0000031	Pa×s	908.19	Joback Method
dvisc	0.0000019	Pa×s	997.95	Joback Method
dvisc	0.0000013	Pa×s	1087.71	Joback Method
dvisc	0.0000009	Pa×s	1177.47	Joback Method

Sources

McGowan Method: http://link.springer.com/article/10.1007/BF02311772
NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=R152013&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