Glycerol - pentapropylene glycol ether, triacetate

Inchi: InChI=1S/C24H44O11/c1-16(9-29-18(3)11-31-20(5)13-33-21(6)25)28-10-17(2)30-12-19(

InchiKey: KXCCMIFWTFRVGQ-UHFFFAOYSA-N

Formula: C24H44O11

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

Mol. weight [g/mol]: 508.60

Physical Properties

Property code	Value	Unit	Source
gf	-1090.20	kJ/mol	Joback Method
hf	-1965.87	kJ/mol	Joback Method
hfus	51.08	kJ/mol	Joback Method
hvap	106.21	kJ/mol	Joback Method
log10ws	-2.56		Crippen Method
logp	2.070		Crippen Method
mcvol	400.690	ml/mol	McGowan Method
pc	854.46	kPa	Joback Method
rinpol	2690.00		NIST Webbook
rinpol	2690.00		NIST Webbook
rinpol	2687.00		NIST Webbook
rinpol	2690.00		NIST Webbook
rinpol	2685.00		NIST Webbook
rinpol	2686.00		NIST Webbook
rinpol	2688.00		NIST Webbook
rinpol	2691.00		NIST Webbook
rinpol	2690.00		NIST Webbook
rinpol	2691.00		NIST Webbook
rinpol	2684.00		NIST Webbook
rinpol	2690.00		NIST Webbook
rinpol	2688.00		NIST Webbook
rinpol	2691.00		NIST Webbook
rinpol	2690.00		NIST Webbook
tb	1086.85	K	Joback Method
tc	1350.40	K	Joback Method
tf	597.87	K	Joback Method
vc	1.506	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1406.24	J/mol×K	1086.85	Joback Method
cpg	1416.00	J/mol×K	1130.77	Joback Method
cpg	1421.85	J/mol×K	1174.70	Joback Method
cpg	1423.67	J/mol×K	1218.62	Joback Method
cpg	1421.38	J/mol×K	1262.55	Joback Method
cpg	1414.88	J/mol×K	1306.47	Joback Method
cpg	1404.06	J/mol×K	1350.40	Joback Method
dvisc	0.0000688	Pa×s	597.87	Joback Method
dvisc	0.0000278	Pa×s	679.37	Joback Method
dvisc	0.0000137	Pa×s	760.86	Joback Method
dvisc	0.0000077	Pa×s	842.36	Joback Method
dvisc	0.0000048	Pa×s	923.86	Joback Method
dvisc	0.0000032	Pa×s	1005.35	Joback Method
dvisc	0.0000023	Pa×s	1086.85	Joback Method

Sources

McGowan Method: http://link.springer.com/article/10.1007/BF02311772
NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=R152033&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