Octapropylene glycol, diacetate

Inchi: InChI=1S/C28H54O11/c1-19(11-32-21(3)13-34-23(5)15-36-25(7)17-38-27(9)29)31-12-20
InchiKey: PBDJQYVLIIEDBC-UHFFFAOYSA-N
Formula: C28H54O11
SMILES: CC(=O)OCC(C)OCC(C)OCC(C)OCC(C)OCC(C)OCC(C)OCC(C)OCC(C)OC(C)=O
Mol. weight [g/mol]: 566.72

Physical Properties

Property code	Value	Unit	Source
gf	-1037.48	kJ/mol	Joback Method
hf	-2078.63	kJ/mol	Joback Method
hfus	53.98	kJ/mol	Joback Method
hvap	110.00	kJ/mol	Joback Method
log10ws	-3.77		Crippen Method
logp	3.337		Crippen Method
mcvol	461.350	ml/mol	McGowan Method
pc	668.04	kPa	Joback Method
rinpol	2916.00		NIST Webbook
rinpol	2921.00		NIST Webbook
rinpol	2923.00		NIST Webbook
rinpol	2920.00		NIST Webbook
rinpol	2917.00		NIST Webbook
rinpol	2919.00		NIST Webbook
rinpol	2924.00		NIST Webbook
rinpol	2920.00		NIST Webbook
rinpol	2916.00		NIST Webbook
rinpol	2921.00		NIST Webbook
rinpol	2924.00		NIST Webbook
rinpol	2916.00		NIST Webbook
rinpol	2924.00		NIST Webbook
rinpol	2920.00		NIST Webbook
rinpol	2920.00		NIST Webbook
tb	1146.04	K	Joback Method
tc	1453.35	K	Joback Method
tf	585.25	K	Joback Method
vc	1.730	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1666.64	J/mol×K	1146.04	Joback Method
cpg	1674.08	J/mol×K	1197.26	Joback Method
cpg	1675.32	J/mol×K	1248.48	Joback Method
cpg	1670.20	J/mol×K	1299.70	Joback Method
cpg	1658.56	J/mol×K	1350.92	Joback Method
cpg	1640.24	J/mol×K	1402.13	Joback Method
cpg	1615.10	J/mol×K	1453.35	Joback Method
dvisc	0.0000431	Pa×s	585.25	Joback Method
dvisc	0.0000138	Pa×s	678.72	Joback Method
dvisc	0.0000058	Pa×s	772.18	Joback Method
dvisc	0.0000030	Pa×s	865.64	Joback Method
dvisc	0.0000017	Pa×s	959.11	Joback Method
dvisc	0.0000011	Pa×s	1052.57	Joback Method
dvisc	0.0000008	Pa×s	1146.04	Joback Method

Sources

NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=R152211&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
McGowan Method: http://link.springer.com/article/10.1007/BF02311772

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