Heptapropylene glycol, diacetate

Inchi: InChI=1S/C25H48O10/c1-17(29-12-19(3)31-14-21(5)33-16-23(7)35-25(9)27)10-28-18(2)
InchiKey: MJSANGZCDHLUFS-UHFFFAOYSA-N
Formula: C25H48O10
SMILES: CC(=O)OCC(C)OCC(C)OCC(C)OCC(C)OCC(C)OCC(C)OCC(C)OC(C)=O
Mol. weight [g/mol]: 508.64

Physical Properties

Property code	Value	Unit	Source
gf	-955.30	kJ/mol	Joback Method
hf	-1879.21	kJ/mol	Joback Method
hfus	48.55	kJ/mol	Joback Method
hvap	101.30	kJ/mol	Joback Method
log10ws	-3.32		Crippen Method
logp	2.932		Crippen Method
mcvol	413.210	ml/mol	McGowan Method
pc	783.75	kPa	Joback Method
rinpol	2654.00		NIST Webbook
rinpol	2655.00		NIST Webbook
rinpol	2651.00		NIST Webbook
rinpol	2664.00		NIST Webbook
rinpol	2655.00		NIST Webbook
rinpol	2660.00		NIST Webbook
rinpol	2655.00		NIST Webbook
rinpol	2658.00		NIST Webbook
rinpol	2659.00		NIST Webbook
rinpol	2664.00		NIST Webbook
rinpol	2663.00		NIST Webbook
rinpol	2658.00		NIST Webbook
rinpol	2654.00		NIST Webbook
rinpol	2660.00		NIST Webbook
rinpol	2654.00		NIST Webbook
tb	1055.42	K	Joback Method
tc	1308.77	K	Joback Method
tf	544.21	K	Joback Method
vc	1.550	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1462.06	J/mol×K	1055.42	Joback Method
cpg	1493.43	J/mol×K	1266.54	Joback Method
cpg	1494.64	J/mol×K	1224.32	Joback Method
cpg	1492.03	J/mol×K	1182.09	Joback Method
cpg	1485.68	J/mol×K	1139.87	Joback Method
cpg	1475.66	J/mol×K	1097.64	Joback Method
cpg	1488.32	J/mol×K	1308.77	Joback Method
dvisc	0.0000020	Pa×s	1055.42	Joback Method
dvisc	0.0000028	Pa×s	970.22	Joback Method
dvisc	0.0000044	Pa×s	885.02	Joback Method
dvisc	0.0000074	Pa×s	799.82	Joback Method
dvisc	0.0000143	Pa×s	714.61	Joback Method
dvisc	0.0000328	Pa×s	629.41	Joback Method
dvisc	0.0000979	Pa×s	544.21	Joback Method

Sources

NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=R152093&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