

Glycerol - tetrapropylene glycol ether, triacetate

Inchi:	InChI=1S/C21H38O10/c1-14(8-25-15(2)9-27-17(4)11-29-18(5)22)26-10-16(3)28-12-21(3)
InchiKey:	FMHQTQMJBXMPJL-UHFFFAOYSA-N
Formula:	C21H38O10
SMILES:	CC(=O)OCC(C)OCC(C)OCC(C)OCC(C)OCC(C)OCC(COC(C)=O)OC(C)=O
Mol. weight [g/mol]:	450.52

Physical Properties

Property code	Value	Unit	Source
gf	-1008.02	kJ/mol	Joback Method
hf	-1766.45	kJ/mol	Joback Method
hfus	45.64	kJ/mol	Joback Method
hvap	97.51	kJ/mol	Joback Method
log10ws	-2.11		Crippen Method
logp	1.665		Crippen Method
mcvol	352.550	ml/mol	McGowan Method
pc	1024.66	kPa	Joback Method
rinpol	2406.00		NIST Webbook
rinpol	2410.00		NIST Webbook
rinpol	2408.00		NIST Webbook
rinpol	2404.00		NIST Webbook
rinpol	2405.00		NIST Webbook
rinpol	2410.00		NIST Webbook
rinpol	2402.00		NIST Webbook
rinpol	2400.00		NIST Webbook
rinpol	2405.00		NIST Webbook
rinpol	2404.00		NIST Webbook
rinpol	2403.00		NIST Webbook
rinpol	2408.00		NIST Webbook
tb	996.23	K	Joback Method
tc	1222.46	K	Joback Method
tf	556.83	K	Joback Method
vc	1.325	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1200.56	J/molxK	996.23	Joback Method
cpg	1213.77	J/molxK	1033.93	Joback Method
cpg	1224.59	J/molxK	1071.64	Joback Method
cpg	1232.95	J/molxK	1109.34	Joback Method
cpg	1238.80	J/molxK	1147.05	Joback Method
cpg	1242.09	J/molxK	1184.75	Joback Method
cpg	1242.76	J/molxK	1222.46	Joback Method
dvisc	0.0001468	Paxs	556.83	Joback Method
dvisc	0.0000628	Paxs	630.06	Joback Method
dvisc	0.0000320	Paxs	703.30	Joback Method
dvisc	0.0000186	Paxs	776.53	Joback Method
dvisc	0.0000118	Paxs	849.76	Joback Method
dvisc	0.0000081	Paxs	923.00	Joback Method
dvisc	0.0000058	Paxs	996.23	Joback Method

Sources

Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci9903071
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
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=R152053&Units=SI

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

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