Nonaeythylene glycol, monoallyl ether, acetate

Inchi: InChI=1S/C23H44O11/c1-3-4-25-5-6-26-7-8-27-9-10-28-11-12-29-13-14-30-15-16-31-17
InchiKey: GICWSHFWSJFUEM-UHFFFAOYSA-N
Formula: C23H44O11
SMILES: C=CCOCCOCCOCCOCCOCCOCCOCCOCCOCCOCCOC(C)=O
Mol. weight [g/mol]: 496.59

Physical Properties

Property code	Value	Unit	Source
gf	-948.30	kJ/mol	Joback Method
hf	-1827.40	kJ/mol	Joback Method
hfus	67.52	kJ/mol	Joback Method
hvap	96.97	kJ/mol	Joback Method
log10ws	0.05		Crippen Method
logp	0.885		Crippen Method
mcvol	390.900	ml/mol	McGowan Method
pc	820.54	kPa	Joback Method
rinpol	3138.00		NIST Webbook
rinpol	3138.00		NIST Webbook
rinpol	3139.00		NIST Webbook
rinpol	3138.00		NIST Webbook
rinpol	3130.00		NIST Webbook
rinpol	3136.00		NIST Webbook
rinpol	3137.00		NIST Webbook
rinpol	3130.00		NIST Webbook
rinpol	3136.00		NIST Webbook
rinpol	3138.00		NIST Webbook
rinpol	3137.00		NIST Webbook
rinpol	3135.00		NIST Webbook
rinpol	3136.00		NIST Webbook
rinpol	3138.00		NIST Webbook
rinpol	3136.00		NIST Webbook
tb	1000.39	K	Joback Method
tc	1247.07	K	Joback Method
tf	619.44	K	Joback Method
vc	1.490	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1351.60	J/mol×K	1000.39	Joback Method
cpg	1398.01	J/mol×K	1205.96	Joback Method
cpg	1395.87	J/mol×K	1164.85	Joback Method
cpg	1390.04	J/mol×K	1123.73	Joback Method
cpg	1380.64	J/mol×K	1082.62	Joback Method
cpg	1367.79	J/mol×K	1041.50	Joback Method
cpg	1396.35	J/mol×K	1247.07	Joback Method
dvisc	0.0000033	Pa×s	1000.39	Joback Method
dvisc	0.0000043	Pa×s	936.90	Joback Method
dvisc	0.0000059	Pa×s	873.41	Joback Method
dvisc	0.0000083	Pa×s	809.92	Joback Method
dvisc	0.0000125	Pa×s	746.42	Joback Method
dvisc	0.0000203	Pa×s	682.93	Joback Method
dvisc	0.0000363	Pa×s	619.44	Joback Method

Sources

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=R152162&Units=SI
Crippen Method: http://pubs.acs.org/doi/abs/10.1021/ci990307l

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