Heptaethylene glycol, monoallyl ether, acetate

Inchi: InChI=1S/C19H36O9/c1-3-4-21-5-6-22-7-8-23-9-10-24-11-12-25-13-14-26-15-16-27-17-1
InchiKey: FLLOYRCLEPGBHR-UHFFFAOYSA-N
Formula: C19H36O9
SMILES: C=CCOCCOCCOCCOCCOCCOCCOCCOC(C)=O
Mol. weight [g/mol]: 408.48

Physical Properties

Property code	Value	Unit	Source
gf	-771.98	kJ/mol	Joback Method
hf	-1480.40	kJ/mol	Joback Method
hfus	54.79	kJ/mol	Joback Method
hvap	83.24	kJ/mol	Joback Method
log10ws	-0.10		Crippen Method
logp	0.852		Crippen Method
mcvol	322.800	ml/mol	McGowan Method
pc	1058.95	kPa	Joback Method
rinpol	2602.00		NIST Webbook
rinpol	2600.00		NIST Webbook
rinpol	2601.00		NIST Webbook
rinpol	2600.00		NIST Webbook
rinpol	2599.00		NIST Webbook
rinpol	2604.00		NIST Webbook
rinpol	2600.00		NIST Webbook
rinpol	2600.00		NIST Webbook
rinpol	2598.00		NIST Webbook
rinpol	2602.00		NIST Webbook
rinpol	2597.00		NIST Webbook
rinpol	2598.00		NIST Webbook
tb	864.03	K	Joback Method
tc	1057.99	K	Joback Method
tf	529.90	K	Joback Method
vc	1.230	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1045.69	J/mol×K	864.03	Joback Method
cpg	1062.93	J/mol×K	896.36	Joback Method
cpg	1078.70	J/mol×K	928.68	Joback Method
cpg	1092.95	J/mol×K	961.01	Joback Method
cpg	1105.65	J/mol×K	993.34	Joback Method
cpg	1116.74	J/mol×K	1025.67	Joback Method
cpg	1126.18	J/mol×K	1057.99	Joback Method
dvisc	0.0001277	Pa×s	529.90	Joback Method
dvisc	0.0000712	Pa×s	585.59	Joback Method
dvisc	0.0000439	Pa×s	641.28	Joback Method
dvisc	0.0000293	Pa×s	696.96	Joback Method
dvisc	0.0000207	Pa×s	752.65	Joback Method
dvisc	0.0000154	Pa×s	808.34	Joback Method
dvisc	0.0000119	Pa×s	864.03	Joback Method

Sources

NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=R152088&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