Pluronic f-68

Inchi: InChI=1S/C2H6O2/c3-1-2-4/h3-4H,1-2H2
InchiKey: LYCAIKOWRPUZTN-UHFFFAOYSA-N
Formula: C2H6O2
SMILES: OCCO
Mol. weight [g/mol]: 62.07

Physical Properties

Property code	Value	Unit	Source
gf	-307.68	kJ/mol	Joback Method
hf	-389.07	kJ/mol	Joback Method
hfus	9.11	kJ/mol	Joback Method
hvap	53.40	kJ/mol	Joback Method
log10ws	0.81		Crippen Method
logp	-1.029		Crippen Method
mcvol	50.780	ml/mol	McGowan Method
pc	6653.02	kPa	Joback Method
tb	429.52	K	Joback Method
tc	589.28	K	Joback Method
tf	233.94	K	Joback Method
vc	0.185	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	99.75	J/mol×K	429.52	Joback Method
cpg	103.79	J/mol×K	456.15	Joback Method
cpg	107.68	J/mol×K	482.77	Joback Method
cpg	111.44	J/mol×K	509.40	Joback Method
cpg	115.05	J/mol×K	536.02	Joback Method
cpg	118.53	J/mol×K	562.65	Joback Method
cpg	121.88	J/mol×K	589.28	Joback Method
dvisc	0.4711165	Pa×s	233.94	Joback Method
dvisc	0.0601273	Pa×s	266.54	Joback Method
dvisc	0.0120189	Pa×s	299.13	Joback Method

dvisc	0.0032966	Pa×s	331.73	Joback Method
dvisc	0.0011397	Pa×s	364.33	Joback Method
dvisc	0.0004691	Pa×s	396.92	Joback Method
dvisc	0.0002210	Pa×s	429.52	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=B6009514&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
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume