1-Propanol, 2-(2-hydroxypropoxy)-

Other names:	2-(2-Hydroxypropoxy)-1-propanol
	2-(2-hydroxypropoxy)propanol
	Dipropylene glycol
Inchi:	InChI=1S/C6H14O3/c1-5(8)4-9-6(2)3-7/h5-8H,3-4H2,1-2H3
InchiKey:	DUFKCOQISQKSAV-UHFFFAOYSA-N
Formula:	C6H14O3
SMILES:	CC(O)COC(C)CO
Mol. weight [g/mol]:	134.17
CAS:	106-62-7

Physical Properties

Property code	Value	Unit	Source
gf	-383.88	kJ/mol	Joback Method
hf	-614.41	kJ/mol	Joback Method
hfus	13.61	kJ/mol	Joback Method
hvap	63.94	kJ/mol	Joback Method
log10ws	-0.17		Crippen Method
logp	-0.235		Crippen Method
mcvol	113.010	ml/mol	McGowan Method
pc	3853.09	kPa	Joback Method
rinpol	1046.20		NIST Webbook
rinpol	1013.00		NIST Webbook
rinpol	1046.20		NIST Webbook
rinpol	1013.00		NIST Webbook
ripol	2191.00		NIST Webbook
ripol	2191.00		NIST Webbook
tb	542.58	K	Joback Method
tc	705.59	K	Joback Method
tf	271.25	K	Joback Method
vc	0.415	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source

cpg	278.16	J/mol×K	542.58	Joback Method
cpg	326.35	J/mol×K	705.59	Joback Method
cpg	319.10	J/mol×K	678.42	Joback Method
cpg	311.54	J/mol×K	651.25	Joback Method
cpg	303.67	J/mol×K	624.08	Joback Method
cpg	295.49	J/mol×K	596.92	Joback Method
cpg	286.98	J/mol×K	569.75	Joback Method
cpl	322.10	J/mol×K	298.00	NIST Webbook
dvisc	0.0000478	Pa×s	542.58	Joback Method
dvisc	0.0001018	Pa×s	497.36	Joback Method
dvisc	0.0002523	Pa×s	452.14	Joback Method
dvisc	0.0007649	Pa×s	406.91	Joback Method
dvisc	0.0030600	Pa×s	361.69	Joback Method
dvisc	0.0181938	Pa×s	316.47	Joback Method
dvisc	0.1960058	Pa×s	271.25	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=C106627&Units=SI
Crippen Method: http://pubs.acs.org/doi/abs/10.1021/ci990307l

Legend

cpg: Ideal gas heat capacity
cpl: Liquid phase 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

ripol:	Polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume