2-Cyclopentylethanol

Other names: 2-Cyclopentaneethanol
Cyclopentaneethanol
Cyclopentylethanol
Inchi: InChI=1S/C7H14O/c8-6-5-7-3-1-2-4-7/h7-8H,1-6H2
InchiKey: JEXQWCBPEWHFKC-UHFFFAOYSA-N
Formula: C7H14O
SMILES: OCCC1CCCC1
Mol. weight [g/mol]: 114.19
CAS: 766-00-7

Physical Properties

Property code	Value	Unit	Source
gf	-92.21	kJ/mol	Joback Method
hf	-279.56	kJ/mol	Joback Method
hfus	11.91	kJ/mol	Joback Method
hvap	48.11	kJ/mol	Joback Method
log10ws	-1.67		Crippen Method
logp	1.559		Crippen Method
mcvol	104.500	ml/mol	McGowan Method
pc	3819.82	kPa	Joback Method
tb	467.02	K	Joback Method
tc	652.78	K	Joback Method
tf	240.37	K	Joback Method
vc	0.388	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	231.14	J/mol×K	467.02	Joback Method
cpg	244.23	J/mol×K	497.98	Joback Method
cpg	256.67	J/mol×K	528.94	Joback Method
cpg	268.49	J/mol×K	559.90	Joback Method
cpg	279.72	J/mol×K	590.86	Joback Method
cpg	290.38	J/mol×K	621.82	Joback Method

cpg	300.48	J/mol×K	652.78	Joback Method
dvisc	0.0476779	Pa×s	240.37	Joback Method
dvisc	0.0109728	Pa×s	278.14	Joback Method
dvisc	0.0035883	Pa×s	315.92	Joback Method
dvisc	0.0014899	Pa×s	353.69	Joback Method
dvisc	0.0007330	Pa×s	391.47	Joback Method
dvisc	0.0004086	Pa×s	429.25	Joback Method
dvisc	0.0002503	Pa×s	467.02	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C766007&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