

Cyclopentanemethanol, «alpha»-methyl-

Other names:	1-Cyclopentylethanol «alpha»-methylcyclopentanemethanol
Inchi:	InChI=1S/C7H14O/c1-6(8)7-4-2-3-5-7/h6-8H,2-5H2,1H3
InchiKey:	WPCMSUSLCWXTKB-UHFFFAOYSA-N
Formula:	C7H14O
SMILES:	CC(O)C1CCCC1
Mol. weight [g/mol]:	114.19
CAS:	52829-98-8

Physical Properties

Property code	Value	Unit	Source
gf	-94.65	kJ/mol	Joback Method
hf	-284.84	kJ/mol	Joback Method
hfus	8.39	kJ/mol	Joback Method
hvap	47.72	kJ/mol	Joback Method
log10ws	-1.78		Crippen Method
logp	1.557		Crippen Method
mcvol	104.500	ml/mol	McGowan Method
pc	3857.88	kPa	Joback Method
tb	466.58	K	Joback Method
tc	656.48	K	Joback Method
tf	225.37	K	Joback Method
vc	0.382	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	231.29	J/mol×K	466.58	Joback Method
cpg	244.74	J/mol×K	498.23	Joback Method
cpg	257.52	J/mol×K	529.88	Joback Method
cpg	269.64	J/mol×K	561.53	Joback Method
cpg	281.14	J/mol×K	593.18	Joback Method
cpg	292.03	J/mol×K	624.83	Joback Method
cpg	302.33	J/mol×K	656.48	Joback Method

dvisc	0.1013136	Paxs	225.37	Joback Method
dvisc	0.0172257	Paxs	265.57	Joback Method
dvisc	0.0046668	Paxs	305.77	Joback Method
dvisc	0.0017127	Paxs	345.98	Joback Method
dvisc	0.0007744	Paxs	386.18	Joback Method
dvisc	0.0004067	Paxs	426.38	Joback Method
dvisc	0.0002386	Paxs	466.58	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=C52829988&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci9903071

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

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