

Cyclopentanemethanol, «alpha»,«alpha»-dimethyl-

Other names:	2-Cyclopentyl-2-propanol
Inchi:	InChI=1S/C8H16O/c1-8(2,9)7-5-3-4-6-7/h7,9H,3-6H2,1-2H3
InchiKey:	PEYUSJVZHOLNDG-UHFFFAOYSA-N
Formula:	C8H16O
SMILES:	CC(C)(O)C1CCCC1
Mol. weight [g/mol]:	128.21
CAS:	1462-06-2

Physical Properties

Property code	Value	Unit	Source
gf	-80.95	kJ/mol	Joback Method
hf	-308.95	kJ/mol	Joback Method
hfus	7.08	kJ/mol	Joback Method
hvap	49.04	kJ/mol	Joback Method
log10ws	-2.20		Crippen Method
logp	1.948		Crippen Method
mcvol	118.590	ml/mol	McGowan Method
pc	3480.65	kPa	Joback Method
tb	486.67	K	Joback Method
tc	682.02	K	Joback Method
tf	254.06	K	Joback Method
vc	0.432	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	277.70	J/mol×K	486.67	Joback Method
cpg	292.86	J/mol×K	519.23	Joback Method
cpg	307.14	J/mol×K	551.79	Joback Method
cpg	320.55	J/mol×K	584.34	Joback Method
cpg	333.17	J/mol×K	616.90	Joback Method
cpg	345.01	J/mol×K	649.46	Joback Method
cpg	356.13	J/mol×K	682.02	Joback Method
dvisc	0.0536172	Paxs	254.06	Joback Method

dvisc	0.0116179	Paxs	292.83	Joback Method
dvisc	0.0035996	Paxs	331.60	Joback Method
dvisc	0.0014253	Paxs	370.37	Joback Method
dvisc	0.0006727	Paxs	409.13	Joback Method
dvisc	0.0003616	Paxs	447.90	Joback Method
dvisc	0.0002145	Paxs	486.67	Joback Method

Sources

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=C1462062&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws

Legend

cp_g:	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
h_{vap}:	Enthalpy of vaporization at standard conditions
log₁₀ws:	Log ₁₀ 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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