

1-Cyclopentyl-1-propanol

Other names:	cyclopentanemethanol, «alpha»-ethyl-
Inchi:	InChI=1S/C8H16O/c1-2-8(9)7-5-3-4-6-7/h7-9H,2-6H2,1H3
InchiKey:	JXLATLGQNUUYCG-UHFFFAOYSA-N
Formula:	C8H16O
SMILES:	CCC(O)C1CCCC1
Mol. weight [g/mol]:	128.21
CAS:	19833-89-7

Physical Properties

Property code	Value	Unit	Source
gf	-86.23	kJ/mol	Joback Method
hf	-305.48	kJ/mol	Joback Method
hfus	10.98	kJ/mol	Joback Method
hvap	49.95	kJ/mol	Joback Method
log10ws	-2.20		Crippen Method
logp	1.948		Crippen Method
mcvol	118.590	ml/mol	McGowan Method
pc	3435.91	kPa	Joback Method
tb	489.46	K	Joback Method
tc	677.28	K	Joback Method
tf	236.64	K	Joback Method
vc	0.438	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	275.03	J/mol×K	489.46	Joback Method
cpg	289.40	J/mol×K	520.76	Joback Method
cpg	303.05	J/mol×K	552.07	Joback Method
cpg	316.00	J/mol×K	583.37	Joback Method
cpg	328.30	J/mol×K	614.68	Joback Method
cpg	339.94	J/mol×K	645.98	Joback Method
cpg	350.98	J/mol×K	677.28	Joback Method
dvisc	0.0794838	Paxs	236.64	Joback Method

dvisc	0.0138811	Paxs	278.78	Joback Method
dvisc	0.0038334	Paxs	320.91	Joback Method
dvisc	0.0014272	Paxs	363.05	Joback Method
dvisc	0.0006525	Paxs	405.19	Joback Method
dvisc	0.0003458	Paxs	447.32	Joback Method
dvisc	0.0002044	Paxs	489.46	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C19833897&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci9903071
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

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
hvap:	Enthalpy of vaporization at standard conditions
log₁₀ws:	Log ₁₀ of Water solubility in mol/l
logp:	Octanol/Water partition coefficient
m_cvol:	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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