

1,2-Cyclopentane-1,2-diol, 3-methyl-

Other names:	3-Methylcyclopentan-1,2-diol 3-Methylcyclopentane-1,2-diol
Inchi:	InChI=1S/C6H12O2/c1-4-2-3-5(7)6(4)8/h4-8H,2-3H2,1H3
InchiKey:	KANFKJUPLALTDB-UHFFFAOYSA-N
Formula:	C6H12O2
SMILES:	CC1CCC(O)C1O
Mol. weight [g/mol]:	116.16
CAS:	27583-37-5

Physical Properties

Property code	Value	Unit	Source
gf	-252.87	kJ/mol	Joback Method
hf	-451.83	kJ/mol	Joback Method
hfus	15.55	kJ/mol	Joback Method
hvap	61.95	kJ/mol	Joback Method
log10ws	-0.74		Crippen Method
logp	0.138		Crippen Method
mvol	96.280	ml/mol	McGowan Method
pc	4468.24	kPa	Joback Method
tb	526.98	K	Joback Method
tc	705.16	K	Joback Method
tf	281.44	K	Joback Method
vc	0.348	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	242.79	J/molxK	526.98	Joback Method
cpg	253.60	J/molxK	556.68	Joback Method
cpg	263.93	J/molxK	586.37	Joback Method
cpg	273.78	J/molxK	616.07	Joback Method
cpg	283.17	J/molxK	645.77	Joback Method
cpg	292.10	J/molxK	675.46	Joback Method
cpg	300.59	J/molxK	705.16	Joback Method

dvisc	0.0567325	Paxs	281.44	Joback Method
dvisc	0.0105469	Paxs	322.36	Joback Method
dvisc	0.0028644	Paxs	363.29	Joback Method
dvisc	0.0010129	Paxs	404.21	Joback Method
dvisc	0.0004336	Paxs	445.13	Joback Method
dvisc	0.0002142	Paxs	486.06	Joback Method
dvisc	0.0001180	Paxs	526.98	Joback Method

Sources

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
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C27583375&Units=SI

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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