

Hexafluoro-1,5-pentanediol

Other names:	2,2,3,3,4,4-Hexafluoropentan-1,5-diol 2,2,3,3,4,4-Hexafluoro-1,5-pentanediol 1,5-Pentanediol, 2,2,3,3,4,4-hexafluoro- Hexafluoroamylene glycol 2,2,3,3,4,4-Hexafluoropentanediol 2,2,3,3,4,4-hexafluoropentane-1,5-diol
Inchi:	InChI=1S/C5H6F6O2/c6-3(7,1-12)5(10,11)4(8,9)2-13/h12-13H,1-2H2
InchiKey:	IELVMUPSWDZWSD-UHFFFAOYSA-N
Formula:	C5H6F6O2
SMILES:	OCC(F)(F)C(F)(F)C(F)(F)CO
Mol. weight [g/mol]:	212.09
CAS:	376-90-9

Physical Properties

Property code	Value	Unit	Source
gf	-1442.76	kJ/mol	Joback Method
hf	-1653.90	kJ/mol	Joback Method
hfus	13.12	kJ/mol	Joback Method
hvap	51.29	kJ/mol	Joback Method
log10ws	-1.38		Crippen Method
logp	0.877		Crippen Method
mcvol	103.670	ml/mol	McGowan Method
pc	3352.86	kPa	Joback Method
tb	484.09	K	Joback Method
tc	626.42	K	Joback Method
tf	278.55	K	Joback Method
vc	0.428	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	273.45	J/molxK	484.09	Joback Method
cpg	280.90	J/molxK	507.81	Joback Method
cpg	287.85	J/molxK	531.53	Joback Method

cpg	294.33	J/mol×K	555.25	Joback Method
cpg	300.36	J/mol×K	578.98	Joback Method
cpg	305.98	J/mol×K	602.70	Joback Method
cpg	311.20	J/mol×K	626.42	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=C376909&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci9903071

Legend

cpg:	Ideal gas heat capacity
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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