Cyclopentanol, 1,2-dimethyl-3-(1-methylethenyl)-, [1R-(1«alpha»,2«beta»,3«beta»)]-

Other names:	Cyclopentanol, 3-isopropenyl-1,2-dimethyl-, (1R,2R,3R)-(+)- Plinol D Plinol D, (+)-
Inchi:	InChI=1S/C10H18O/c1-7(2)9-5-6-10(4,11)8(9)3/h8-9,11H,1,5-6H2,2-4H3
InchiKey:	ZRVPDCMGGOSDKG-UHFFFAOYSA-N
Formula:	C10H18O
SMILES:	C=C(C)C1CCC(C)(O)C1C
Mol. weight [g/mol]:	154.25
CAS:	4028-58-4

Physical Properties

Property code	Value	Unit	Source
gf	-8.57	kJ/mol	Joback Method
hf	-251.28	kJ/mol	Joback Method
hfus	12.93	kJ/mol	Joback Method
hvap	52.43	kJ/mol	Joback Method
log10ws	-2.65		Crippen Method
logp	2.360		Crippen Method
mcvol	142.470	ml/mol	McGowan Method
pc	2829.33	kPa	Joback Method
rinpol	1503.00		NIST Webbook
tb	523.12	K	Joback Method
tc	716.53	K	Joback Method
tf	273.88	K	Joback Method
vc	0.533	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	349.90	J/mol×K	523.12	Joback Method
cpg	365.68	J/mol×K	555.35	Joback Method
cpg	380.58	J/mol×K	587.59	Joback Method
cpg	394.67	J/mol×K	619.82	Joback Method
cpg	408.03	J/mol×K	652.06	Joback Method

cpg	420.76	J/mol×K	684.29	Joback Method
cpg	432.93	J/mol×K	716.53	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C4028584&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
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

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
rinpol:	Non-polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume