

Limonene oxide, cis-

Other names:	4-Isopropenyl-1-methyl-7-oxabicyclo[4.1.0]heptane, (1«alpha»,4«alpha»,6«alpha»)- cis-Limonene oxide cis-1,2-Epoxy limonene p-Menth-8-ene, 1,2-epoxy-, cis- cis-Limonene epoxide (Z)-Limonene oxide cis-1,2-Limonene epoxide cis-Limonene-1,2-epoxide cis-limonene-1,2-oxide (+)-cis-limonene oxide cis-Limonen-1,2-epoxide Limonene, epoxy, cis cis-Limonene oxyde
Inchi:	InChI=1S/C10H16O/c1-7(2)8-4-5-10(3)9(6-8)11-10/h8-9H,1,4-6H2,2-3H3
InchiKey:	CCEFMUBVSUDRLG-UHFFFAOYSA-N
Formula:	C10H16O
SMILES:	C=C(C)C1CCC2(C)OC2C1
Mol. weight [g/mol]:	152.23
CAS:	13837-75-7

Physical Properties

Property code	Value	Unit	Source
gf	122.69	kJ/mol	Joback Method
hf	-131.75	kJ/mol	Joback Method
hfus	15.99	kJ/mol	Joback Method
hvap	40.31	kJ/mol	Joback Method
log10ws	-2.72		Crippen Method
logp	2.520		Crippen Method
mccvol	131.610	ml/mol	McGowan Method
pc	2944.08	kPa	Joback Method
rinpol	1134.00		NIST Webbook
rinpol	1134.00		NIST Webbook
rinpol	1134.00		NIST Webbook
rinpol	1134.00		NIST Webbook
rinpol	1102.00		NIST Webbook
rinpol	1098.00		NIST Webbook
rinpol	1131.00		NIST Webbook

rinpol	1134.00	NIST Webbook
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rinpol	1100.00	NIST Webbook
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ripol	1407.00	NIST Webbook

ripol	1449.00		NIST Webbook
ripol	1449.00		NIST Webbook
tb	465.03	K	Joback Method
tc	678.77	K	Joback Method
tf	265.33	K	Joback Method
vc	0.501	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	303.56	J/mol×K	465.03	Joback Method
cpg	322.20	J/mol×K	500.65	Joback Method
cpg	339.41	J/mol×K	536.28	Joback Method
cpg	355.33	J/mol×K	571.90	Joback Method
cpg	370.12	J/mol×K	607.52	Joback Method
cpg	383.92	J/mol×K	643.14	Joback Method
cpg	396.88	J/mol×K	678.77	Joback Method

Sources

Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307I
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=C13837757&Units=SI

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
ripol:	Polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume

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