7-Oxabicyclo[4.1.0]heptane, 1-methyl-4-(2-methyloxiranyl)-

Other names: p-Menthane, 1,2:8,9-diepoxy-
«alpha»-Limonene diepoxide
Dipentene diepoxide
Dipentene dioxide
Dipentene oxide
Epoxide 269
Limonene dioxide
Unox Epoxide 269
Unox 269
Unoxat Epoxide 269
1,2:8,9-Diepoxy-p-menthane
1,2:8,9-Diepoxylimonene
Limonene diepoxide
Menthane, 1,2:8,9-diepoxy-
1,2,8,9-Diepoxylimonene
1-Methyl-4-(2-methyloxiranyl)-7-oxabicyclo[4.1.0]heptane
Diepoxylimonene
NSC 30545

Inchi: InChI=1S/C10H16O2/c1-9-4-3-7(5-8(9)12-9)10(2)6-11-10/h7-8H,3-6H2,1-2H3

InchiKey: RBHIUNHSNSQJNG-UHFFFAOYSA-N

Formula: C10H16O2

SMILES: CC1(C2CCC3(C)OC3C2)CO1

Mol. weight [g/mol]: 168.23

CAS: 96-08-2

Physical Properties

Property code	Value	Unit	Source
gf	12.54	kJ/mol	Joback Method
hf	-291.35	kJ/mol	Joback Method
hfus	18.39	kJ/mol	Joback Method
hvap	44.17	kJ/mol	Joback Method
log10ws	-1.96		Crippen Method
logp	1.733		Crippen Method
mcvol	130.920	ml/mol	McGowan Method
pc	3364.54	kPa	Joback Method
rinpol	1294.00		NIST Webbook
ripol	2059.00		NIST Webbook

ripol	1967.00		NIST Webbook
tb	502.40	K	Joback Method
tc	732.54	K	Joback Method
tf	349.46	K	Joback Method
vc	0.495	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	340.60	J/mol×K	502.40	Joback Method
cpg	359.66	J/mol×K	540.76	Joback Method
cpg	376.90	J/mol×K	579.11	Joback Method
cpg	392.66	J/mol×K	617.47	Joback Method
cpg	407.23	J/mol×K	655.83	Joback Method
cpg	420.94	J/mol×K	694.18	Joback Method
cpg	434.10	J/mol×K	732.54	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=C96082&Units=SI
Crippen Method: http://pubs.acs.org/doi/abs/10.1021/ci990307l

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