6-Oxabicyclo[3.1.0]hexane

Other names:	Cyclopentane oxide
	Cyclopentane, 1,2-epoxy-
	Cyclopentene epoxide
	Cyclopentene oxide
	1,2-Epoxycyclopentane
	Epoxycyclopentane
	cis-1,2-Epoxycyclopentane
Inchi:	InChI=1S/C5H8O/c1-2-4-5(3-1)6-4/h4-5H,1-3H2
InchiKey:	GJEZBVHHZQAEDB-UHFFFAOYSA-N
Formula:	C5H8O
SMILES:	C1CC2OC2C1
Mol. weight [g/mol]:	84.12
CAS:	285-67-6

Physical Properties

Property code	Value	Unit	Source
chl	-2980.10 ± 6.10	kJ/mol	NIST Webbook
gf	26.60	kJ/mol	Joback Method
hf	-97.10 ± 7.00	kJ/mol	NIST Webbook
hfl	-130.80 ± 6.40	kJ/mol	NIST Webbook
hfus	12.95	kJ/mol	Joback Method
hvap	33.70 ± 2.90	kJ/mol	NIST Webbook
hvap	33.70	kJ/mol	NIST Webbook
log10ws	-1.02		Crippen Method
logp	0.938		Crippen Method
mcvol	65.460	ml/mol	McGowan Method
pc	4775.98	kPa	Joback Method
tb	375.20	K	NIST Webbook
tc	551.91	K	Joback Method
tf	208.56	K	Joback Method
vc	0.251	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	116.56	J/mol×K	354.23	Joback Method
cpg	170.31	J/mol×K	518.96	Joback Method
cpg	161.08	J/mol×K	486.01	Joback Method
cpg	151.14	J/mol×K	453.07	Joback Method
cpg	140.44	J/mol×K	420.12	Joback Method
cpg	128.93	J/mol×K	387.18	Joback Method
cpg	178.87	J/mol×K	551.91	Joback Method
dvisc	0.0004614	Pa×s	354.23	Joback Method
dvisc	0.0004591	Pa×s	329.95	Joback Method
dvisc	0.0004565	Pa×s	305.67	Joback Method
dvisc	0.0004535	Pa×s	281.39	Joback Method
dvisc	0.0004499	Pa×s	257.12	Joback Method
dvisc	0.0004456	Pa×s	232.84	Joback Method
dvisc	0.0004404	Pa×s	208.56	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=C285676&Units=SI
Crippen Method: http://pubs.acs.org/doi/abs/10.1021/ci990307l

Legend

chl: Standard liquid enthalpy of combustion
cpg: Ideal gas heat capacity
dvisc: Dynamic viscosity
gf: Standard Gibbs free energy of formation
hf: Enthalpy of formation at standard conditions
hfl: Liquid phase 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