9-Oxabicyclo[6.1.0]nonane

Other names:	cis-9-oxabicyclo[6.1.0]nonane
	Cyclooctane, 1,2-epoxy-
	Cyclooctene, oxide
	1,2-Epoxycyclooctane
	Epoxycyclooctane
	cis-1,2-Epoxycyclooctane
Inchi:	InChI=1S/C8H14O/c1-2-4-6-8-7(9-8)5-3-1/h7-8H,1-6H2
InchiKey:	MELPJGOMEMRMPL-UHFFFAOYSA-N
Formula:	C8H14O
SMILES:	C1CCCC2OC2CC1
Mol. weight [g/mol]:	126.20
CAS:	286-62-4

Physical Properties

Property code	Value	Unit	Source
chs	-4936.40 ± 2.20	kJ/mol	NIST Webbook
chs	-4936.40 ± 2.20	kJ/mol	NIST Webbook
gf	15.56	kJ/mol	Joback Method
hf	-165.10 ± 2.40	kJ/mol	NIST Webbook
hf	-165.10 ± 2.40	kJ/mol	NIST Webbook
hfs	-212.50 ± 2.20	kJ/mol	NIST Webbook
hfs	-212.50 ± 2.20	kJ/mol	NIST Webbook
hfus	14.42	kJ/mol	Joback Method
hsub	47.40	kJ/mol	NIST Webbook
hsub	47.40 ± 1.00	kJ/mol	NIST Webbook
hsub	47.40 ± 1.00	kJ/mol	NIST Webbook
hvap	38.25	kJ/mol	Joback Method
log10ws	-2.27		Crippen Method
logp	2.108		Crippen Method
mcvol	107.730	ml/mol	McGowan Method
pc	3628.97	kPa	Joback Method
tb	435.68	K	Joback Method
tc	654.15	K	Joback Method
tf	231.81	K	Joback Method
vc	0.395	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	230.10	J/mol×K	435.68	Joback Method
cpg	248.80	J/mol×K	472.09	Joback Method
cpg	266.33	J/mol×K	508.50	Joback Method
cpg	282.76	J/mol×K	544.91	Joback Method
cpg	298.13	J/mol×K	581.32	Joback Method
cpg	312.50	J/mol×K	617.73	Joback Method
cpg	325.93	J/mol×K	654.15	Joback Method
dvisc	0.0032638	Pa×s	231.81	Joback Method
dvisc	0.0019879	Pa×s	265.79	Joback Method
dvisc	0.0013548	Pa×s	299.77	Joback Method
dvisc	0.0009983	Pa×s	333.75	Joback Method
dvisc	0.0007784	Pa×s	367.72	Joback Method
dvisc	0.0006330	Pa×s	401.70	Joback Method
dvisc	0.0005316	Pa×s	435.68	Joback Method

Pressure Dependent Properties

Property code	Value	Unit	Pressure [kPa]	Source
tbrp	328.20	K	0.70	NIST Webbook

Sources

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=C286624&Units=SI

Crippen Method: http://pubs.acs.org/doi/abs/10.1021/ci990307l

Crippen Method: https://www.chemeo.com/doc/models/crippen_log10ws

Legend

chs:	Standard solid 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
hfs:	Solid phase enthalpy of formation at standard conditions
hfus:	Enthalpy of fusion at standard conditions
hsub:	Enthalpy of sublimation 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
tbrp:	Boiling point at reduced pressure
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume