

1,2-Epoxy-8-methylnonane

Inchi:	InChI=1S/C10H20O/c1-9(2)6-4-3-5-7-10-8-11-10/h9-10H,3-8H2,1-2H3
InchiKey:	NBADXIBTCPFODP-UHFFFAOYSA-N
Formula:	C10H20O
SMILES:	CC(C)CCCCC1CO1
Mol. weight [g/mol]:	156.27

Physical Properties

Property code	Value	Unit	Source
gf	5.51	kJ/mol	Joback Method
hf	-314.21	kJ/mol	Joback Method
hfus	24.25	kJ/mol	Joback Method
hvap	41.89	kJ/mol	Joback Method
log10ws	-2.86		Crippen Method
logp	2.992		Crippen Method
mcvol	146.770	ml/mol	McGowan Method
pc	2381.86	kPa	Joback Method
rinpol	1177.00		NIST Webbook
tb	461.45	K	Joback Method
tc	641.05	K	Joback Method
tf	231.97	K	Joback Method
vc	0.568	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	334.38	J/mol×K	461.45	Joback Method
cpg	408.74	J/mol×K	611.12	Joback Method
cpg	395.31	J/mol×K	581.18	Joback Method
cpg	381.19	J/mol×K	551.25	Joback Method
cpg	366.35	J/mol×K	521.32	Joback Method
cpg	350.76	J/mol×K	491.38	Joback Method
cpg	421.51	J/mol×K	641.05	Joback Method
dvisc	0.0004406	Paxs	461.45	Joback Method
dvisc	0.0005360	Paxs	423.20	Joback Method

dvisc	0.0006780	Paxs	384.96	Joback Method
dvisc	0.0009032	Paxs	346.71	Joback Method
dvisc	0.0012919	Paxs	308.46	Joback Method
dvisc	0.0020449	Paxs	270.22	Joback Method
dvisc	0.0037662	Paxs	231.97	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=R412474&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci9903071
Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws
Joback Method:	https://en.wikipedia.org/wiki/Joback_method

Legend

cpg:	Ideal gas heat capacity
dvisc:	Dynamic viscosity
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
mccvol:	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

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