Oxirane, 2,2'-(1,4-butanediyl)bis-

Other names:	1,2:7,8-Diepoxyoctane
	Octane, 1,2:7,8-diepoxy-
	1,2,7,8-Diepoxyoctane
	1,7-Octadiene diepoxide
	1,2-Epoxy-7,8-epoxyoctane
Inchi:	InChI=1S/C8H14O2/c1(3-7-5-9-7)2-4-8-6-10-8/h7-8H,1-6H2
InchiKey:	LFKLPJRVSHJZPL-UHFFFAOYSA-N
Formula:	C8H14O2
SMILES:	C(CCC1CO1)CC1CO1
Mol. weight [g/mol]:	142.20
CAS:	2426-07-5

Physical Properties

Property code	Value	Unit	Source
gf	-34.26	kJ/mol	Joback Method
hf	-326.85	kJ/mol	Joback Method
hfus	28.70	kJ/mol	Joback Method
hvap	42.25	kJ/mol	Joback Method
log10ws	-1.36		Crippen Method
logp	1.344		Crippen Method
mcvol	113.600	ml/mol	McGowan Method
pc	3287.81	kPa	Joback Method
tb	513.20	K	NIST Webbook
tc	643.31	K	Joback Method
tf	268.94	K	Joback Method
vc	0.440	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	263.81	J/mol×K	449.82	Joback Method
cpg	278.79	J/mol×K	482.07	Joback Method
cpg	292.86	J/mol×K	514.32	Joback Method
cpg	306.06	J/mol×K	546.57	Joback Method

cpg	318.45	J/mol×K	578.81	Joback Method
cpg	330.09	J/mol×K	611.06	Joback Method
cpg	341.02	J/mol×K	643.31	Joback Method
dvisc	0.0019606	Pa×s	268.94	Joback Method
dvisc	0.0016343	Pa×s	299.09	Joback Method
dvisc	0.0014084	Pa×s	329.23	Joback Method
dvisc	0.0012444	Pa×s	359.38	Joback Method
dvisc	0.0011208	Pa×s	389.53	Joback Method
dvisc	0.0010248	Pa×s	419.67	Joback Method
dvisc	0.0009483	Pa×s	449.82	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C2426075&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
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
mcvol:	McGowan's characteristic volume
pc:	Critical Pressure
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume