Oxirane, [([1,1'-biphenyl]-2-yloxy)methyl]-

Other names:	(((1,1'-Biphenyl)-2-yloxy)methyl)oxirane
	Biphenyl, 2-(2,3-epoxypropoxy)-
	Propane, 1-(2-biphenylyloxy)-2,3-epoxy-
	Propane, 1,2-epoxy-3-(2-xenolyl)-
	3-(2-Biphenylyloxy)propylene oxide
	3-(2-Diphenylyloxy)-1,2-epoxypropane
	3-(2-Xenolyl)-1,2-epoxypropane
	3-(2-Xenyloxy)-1,2-epoxypropane
	3-(2-Xenyloxy)propylene oxide
	2-Biphenylyl glycidyl ether
	Propane, 1-(2'-biphenyloxy)-2,3-epoxy-
	OPP-G
	Oxirane, 2-((1,1'-biphenyl-2-yloxy)methyl)-
	2-[([1,1'-Biphenyl]-2-yloxy)methyl]oxirane
	biphenyl-2-yl 2,3-epoxypropyl ether
Inchi:	InChI=1S/C15H14O2/c1-2-6-12(7-3-1)14-8-4-5-9-15(14)17-11-13-10-16-13/h1-9,13H,10-
InchiKey:	DNVXWIINBUTFEP-UHFFFAOYSA-N
Formula:	C15H14O2
SMILES:	c1ccc(-c2ccccc2OCC2CO2)cc1
Mol. weight [g/mol]:	226.27
CAS:	7144-65-2

Physical Properties

Property code	Value	Unit	Source
gf	160.24	kJ/mol	Joback Method
hf	-82.76	kJ/mol	Joback Method
hfus	29.60	kJ/mol	Joback Method
hvap	61.03	kJ/mol	Joback Method
log10ws	-4.13		Crippen Method
logp	3.131		Crippen Method
mcvol	175.570	ml/mol	McGowan Method
pc	2749.78	kPa	Joback Method
tb	657.05	K	Joback Method
tc	902.61	K	Joback Method
tf	390.91	K	Joback Method
vc	0.655	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	463.86	J/mol×K	657.05	Joback Method
cpg	536.36	J/mol×K	861.69	Joback Method
cpg	524.18	J/mol×K	820.76	Joback Method
cpg	510.94	J/mol×K	779.83	Joback Method
cpg	496.53	J/mol×K	738.90	Joback Method
cpg	480.87	J/mol×K	697.98	Joback Method
cpg	547.56	J/mol×K	902.61	Joback Method
dvisc	0.0003174	Pa×s	657.05	Joback Method
dvisc	0.0003774	Pa×s	612.69	Joback Method
dvisc	0.0004610	Pa×s	568.34	Joback Method
dvisc	0.0005826	Pa×s	523.98	Joback Method
dvisc	0.0007688	Pa×s	479.62	Joback Method
dvisc	0.0010736	Pa×s	435.27	Joback Method
dvisc	0.0016172	Pa×s	390.91	Joback Method

Sources

NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=C7144652&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
McGowan Method: http://link.springer.com/article/10.1007/BF02311772

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