p-Cresyl glycidyl ether

Other names:	2,3-Epoxypropyl p-tolyl ether
	Oxirane, [(4-methylphenoxy)methyl]-
	Propane, 1,2-epoxy-3-(p-tolyloxy)-
	p-Cresol glycidyl ether
	1,2-Epoxy-3-(p-tolyloxy)propane
	Glycidyl 4-methylphenyl ether
	Glycidyl p-tolyl ether
	2-[(4-Methylphenoxy)methyl]oxirane
	((4-Methylphenoxy)methyl)oxirane
	NSC 112255
	p-Methylphenol glycidyl ether
	[(p-tolyloxy)methyl]oxirane
Inchi:	InChI=1S/C10H12O2/c1-8-2-4-9(5-3-8)11-6-10-7-12-10/h2-5,10H,6-7H2,1H3
InchiKey:	CUFXMPWHOWYNSO-UHFFFAOYSA-N
Formula:	C10H12O2
SMILES:	Cc1ccc(OCC2CO2)cc1
Mol. weight [g/mol]:	164.20
CAS:	2186-24-5

Physical Properties

Property code	Value	Unit	Source
gf	5.73	kJ/mol	Joback Method
hf	-216.09	kJ/mol	Joback Method
hfus	22.61	kJ/mol	Joback Method
hvap	47.62	kJ/mol	Joback Method
log10ws	-2.00		Crippen Method
logp	1.773		Crippen Method
mcvol	128.880	ml/mol	McGowan Method
pc	3235.66	kPa	Joback Method
tb	515.97	K	Joback Method
tc	735.33	K	Joback Method
tf	308.14	K	Joback Method
vc	0.483	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	296.69	J/mol×K	515.97	Joback Method
cpg	311.47	J/mol×K	552.53	Joback Method
cpg	325.34	J/mol×K	589.09	Joback Method
cpg	338.35	J/mol×K	625.65	Joback Method
cpg	350.52	J/mol×K	662.21	Joback Method
cpg	361.91	J/mol×K	698.77	Joback Method
cpg	372.56	J/mol×K	735.33	Joback Method
dvisc	0.0016203	Pa×s	308.14	Joback Method
dvisc	0.0011418	Pa×s	342.78	Joback Method
dvisc	0.0008580	Pa×s	377.42	Joback Method
dvisc	0.0006764	Pa×s	412.06	Joback Method
dvisc	0.0005534	Pa×s	446.69	Joback Method
dvisc	0.0004659	Pa×s	481.33	Joback Method
dvisc	0.0004015	Pa×s	515.97	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=C2186245&Units=SI
Crippen Method: http://pubs.acs.org/doi/abs/10.1021/ci990307l

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