Dill ether

Other names:	(3R,4S,8R)-3,9-epoxy-1-p-menthene
	3,9-Epoxy-1-p-menthene
	3,9-Epoxy-p-menth-1-ene
Inchi:	InChI=1S/C10H16O/c1-7-3-4-9-8(2)6-11-10(9)5-7/h5,8-10H,3-4,6H2,1-2H3
InchiKey:	KBPPPUZMFQKLNP-UHFFFAOYSA-N
Formula:	C10H16O
SMILES:	CC1=CC2OCC(C)C2CC1
Mol. weight [g/mol]:	152.23
CAS:	74410-10-9

Physical Properties

Property code	Value	Unit	Source
gf	45.02	kJ/mol	Joback Method
hf	-228.64	kJ/mol	Joback Method
hfus	21.51	kJ/mol	Joback Method
hvap	43.35	kJ/mol	Joback Method
log10ws	-2.37		Crippen Method
logp	2.378		Crippen Method
mcvol	131.610	ml/mol	McGowan Method
pc	2878.12	kPa	Joback Method
rinpol	1184.00		NIST Webbook
rinpol	1192.00		NIST Webbook
rinpol	1178.00		NIST Webbook
rinpol	1187.00		NIST Webbook
rinpol	1192.00		NIST Webbook
rinpol	1176.00		NIST Webbook
rinpol	1186.00		NIST Webbook
rinpol	1184.00		NIST Webbook
rinpol	1191.20		NIST Webbook
rinpol	1183.00		NIST Webbook
rinpol	1180.00		NIST Webbook
rinpol	1184.00		NIST Webbook
rinpol	1184.00		NIST Webbook
rinpol	1176.00		NIST Webbook
rinpol	1182.00		NIST Webbook
rinpol	1191.20		NIST Webbook
rinpol	1181.00		NIST Webbook

rinpol	1165.00		NIST Webbook
rinpol	1187.00		NIST Webbook
rinpol	1197.00		NIST Webbook
rinpol	1187.00		NIST Webbook
rinpol	1186.00		NIST Webbook
rinpol	1164.00		NIST Webbook
rinpol	1235.00		NIST Webbook
ripol	1527.00		NIST Webbook
ripol	1529.00		NIST Webbook
ripol	1529.00		NIST Webbook
ripol	1506.00		NIST Webbook
ripol	1484.00		NIST Webbook
ripol	1545.00		NIST Webbook
ripol	1484.00		NIST Webbook
ripol	1529.00		NIST Webbook
tb	480.91	K	Joback Method
tc	696.47	K	Joback Method
tf	263.39	K	Joback Method
vc	0.491	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	305.76	J/mol×K	480.91	Joback Method
cpg	324.79	J/mol×K	516.84	Joback Method
cpg	342.73	J/mol×K	552.76	Joback Method
cpg	359.61	J/mol×K	588.69	Joback Method
cpg	375.49	J/mol×K	624.62	Joback Method
cpg	390.39	J/mol×K	660.54	Joback Method
cpg	404.38	J/mol×K	696.47	Joback Method
dvisc	0.0017141	Pa×s	263.39	Joback Method
dvisc	0.0012470	Pa×s	299.64	Joback Method
dvisc	0.0009716	Pa×s	335.90	Joback Method
dvisc	0.0007948	Pa×s	372.15	Joback Method
dvisc	0.0006738	Pa×s	408.40	Joback Method
dvisc	0.0005868	Pa×s	444.66	Joback Method
dvisc	0.0005218	Pa×s	480.91	Joback Method

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=C70786446&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws

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
rinpol:	Non-polar retention indices
ripol:	Polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume