

4-methylepoxystyrene

Inchi:	InChI=1S/C9H10O/c1-7-2-4-8(5-3-7)9-6-10-9/h2-5,9H,6H2,1H3
InchiKey:	QAWJAMQTRGCJMH-UHFFFAOYSA-N
Formula:	C9H10O
SMILES:	Cc1ccc(C2CO2)cc1
Mol. weight [g/mol]:	134.18

Physical Properties

Property code	Value	Unit	Source
gf	102.31	kJ/mol	Joback Method
hf	-63.23	kJ/mol	Joback Method
hfus	18.83	kJ/mol	Joback Method
hvap	42.99	kJ/mol	Joback Method
log10ws	-2.19		Crippen Method
logp	2.066		Crippen Method
mcvol	108.920	ml/mol	McGowan Method
pc	3695.46	kPa	Joback Method
ripol	1782.00		NIST Webbook
ripol	1782.70		NIST Webbook
ripol	1782.00		NIST Webbook
tb	470.67	K	Joback Method
tc	696.07	K	Joback Method
tf	274.64	K	Joback Method
vc	0.409	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	229.43	J/molxK	470.67	Joback Method
cpg	243.71	J/molxK	508.24	Joback Method
cpg	256.99	J/molxK	545.80	Joback Method
cpg	269.35	J/molxK	583.37	Joback Method
cpg	280.83	J/molxK	620.94	Joback Method
cpg	291.50	J/molxK	658.50	Joback Method
cpg	301.42	J/molxK	696.07	Joback Method

dvisc	0.0016500	Paxs	274.64	Joback Method
dvisc	0.0011869	Paxs	307.31	Joback Method
dvisc	0.0009095	Paxs	339.98	Joback Method
dvisc	0.0007303	Paxs	372.65	Joback Method
dvisc	0.0006075	Paxs	405.33	Joback Method
dvisc	0.0005194	Paxs	438.00	Joback Method
dvisc	0.0004539	Paxs	470.67	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=R321650&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci9903071

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

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