2-Propenoic acid, 3-(3-hydroxyphenyl)-

Other names:	Cinnamic acid, m-hydroxy-
	m-Coumaric acid
	m-Hydroxycinnamic acid
	3-Coumaric acid
	3-(3-Hydroxyphenyl)acrylsaeure
	3-(3-Hydroxyphenyl)acrylic acid
	3-(3-Hydroxyphenyl)-2-propenoic acid
	NSC 28956
	NSC 50308
	3-hydroxycinnamic acid
Inchi:	InChI=1S/C9H8O3/c10-8-3-1-2-7(6-8)4-5-9(11)12/h1-6,10H,(H,11,12)/b5-4+
InchiKey:	KKSDGJDHHZEWEP-SNAWJCMRSA-N
Formula:	C9H8O3
SMILES:	O=C(O)C=Cc1cccc(O)c1
Mol. weight [g/mol]:	164.16
CAS:	588-30-7

Physical Properties

Property code	Value	Unit	Source
gf	-202.83	kJ/mol	Joback Method
hf	-317.46	kJ/mol	Joback Method
hfus	24.78	kJ/mol	Joback Method
hvap	74.30	kJ/mol	Joback Method
log10ws	-1.36		Crippen Method
logp	1.490		Crippen Method
mcvol	122.920	ml/mol	McGowan Method
pc	5138.68	kPa	Joback Method
rinpol	1621.00		NIST Webbook
rinpol	1621.00		NIST Webbook
tb	662.83	K	Joback Method
tc	884.22	K	Joback Method
tf	435.00	K	Joback Method
vc	0.403	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	302.19	J/mol×K	662.83	Joback Method
cpg	338.88	J/mol×K	847.32	Joback Method
cpg	332.34	J/mol×K	810.42	Joback Method
cpg	325.49	J/mol×K	773.52	Joback Method
cpg	318.25	J/mol×K	736.63	Joback Method
cpg	310.51	J/mol×K	699.73	Joback Method
cpg	345.20	J/mol×K	884.22	Joback Method
dvisc	0.0000077	Pa×s	662.83	Joback Method
dvisc	0.0000130	Pa×s	624.86	Joback Method
dvisc	0.0000232	Pa×s	586.89	Joback Method
dvisc	0.0000452	Pa×s	548.91	Joback Method
dvisc	0.0000971	Pa×s	510.94	Joback Method
dvisc	0.0002358	Pa×s	472.97	Joback Method
dvisc	0.0006684	Pa×s	435.00	Joback Method

Sources

McGowan Method: http://link.springer.com/article/10.1007/BF02311772
NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=C588307&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
rinpol:	Non-polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume