2-HYDROXY-4-METHYLBENZOIC ACID

Other names:	2,4-Cresotic acid
	2-Hydroxy-p-toluic acid
	4-Methyl-2-hydroxybenzoic acid
	4-Methylsalicylic acid
	Benzoic acid, 2-hydroxy-4-methyl-
	NSC 16634
	m-Cresotic acid
	m-Cresotinic acid
	m-Homosalicylic acid
	«gamma»-Cresotic acid
Inchi:	InChI=1S/C8H8O3/c1-5-2-3-6(8(10)11)7(9)4-5/h2-4,9H,1H3,(H,10,11)
InchiKey:	NJESAXZANHETJV-UHFFFAOYSA-N
Formula:	C8H8O3
SMILES:	Cc1ccc(C(=O)O)c(O)c1
Mol. weight [g/mol]:	152.15

Physical Properties

Property code	Value	Unit	Source
hf	-513.92	kJ/mol	Cheméo Relay (1.0)
hfus	21.60	kJ/mol	Joback Method
hvap	87.47	kJ/mol	Cheméo Relay (1.0)
ie	8.50	eV	Cheméo Relay (1.0)
log10ws	-2.36		Cheméo Relay (1.0)
logp	1.399		Crippen Method
mcvol	113.130	ml/mol	McGowan Method
pc	5359.18	kPa	Joback Method
tb	549.69	K	Cheméo Relay (1.0)
tc	814.69	K	Cheméo Relay (1.0)
tf	446.00 ± 4.00	K	NIST Webbook

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	276.61	J/mol×K	640.77	Joback Method

cpg	318.35	J/mol×K	858.15	Joback Method
cpg	312.29	J/mol×K	821.92	Joback Method
cpg	305.95	J/mol×K	785.69	Joback Method
cpg	299.28	J/mol×K	749.46	Joback Method
cpg	292.21	J/mol×K	713.23	Joback Method
cpg	284.67	J/mol×K	677.00	Joback Method
dvisc	0.0000568	Pa×s	541.05	Joback Method
dvisc	0.0000116	Pa×s	640.77	Joback Method
dvisc	0.0000186	Pa×s	607.53	Joback Method
dvisc	0.0000314	Pa×s	574.29	Joback Method
dvisc	0.0005703	Pa×s	441.33	Joback Method
dvisc	0.0001108	Pa×s	507.81	Joback Method
dvisc	0.0002373	Pa×s	474.57	Joback Method

Sources

Crippen Method: https://www.chemeo.com/doc/models/crippen_log10ws
Cheméo Relay (1.0):
Cheméo Relay (1.0, beta):
NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=C50851&Units=SI
Joback Method: https://en.wikipedia.org/wiki/Joback_method
McGowan Method: http://link.springer.com/article/10.1007/BF02311772
Crippen Method: http://pubs.acs.org/doi/abs/10.1021/ci990307l

Legend

cpg: Ideal gas heat capacity
dvisc: Dynamic viscosity
hf: Enthalpy of formation at standard conditions
hfus: Enthalpy of fusion at standard conditions
hvap: Enthalpy of vaporization at standard conditions
ie: Ionization energy
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