

5,5'-Methylene disalicylaldehyde

Inchi:	InChI=1S/C15H12O4/c16-8-12-6-10(1-3-14(12)18)5-11-2-4-15(19)13(7-11)9-17/h1-4,6-9
InchiKey:	OWPBOKWFRAIKTD-UHFFFAOYSA-N
Formula:	C15H12O4
SMILES:	O=Cc1cc(Cc2ccc(O)c(C=O)c2)ccc1O
Mol. weight [g/mol]:	256.25
CAS:	3046-82-0

Physical Properties

Property code	Value	Unit	Source
gf	-227.30	kJ/mol	Joback Method
hf	-428.59	kJ/mol	Joback Method
hfus	38.05	kJ/mol	Joback Method
hvap	94.33	kJ/mol	Joback Method
log10ws	-3.15		Crippen Method
logp	2.314		Crippen Method
mcvol	189.570	ml/mol	McGowan Method
pc	4005.77	kPa	Joback Method
tb	864.48	K	Joback Method
tc	1115.65	K	Joback Method
tf	644.13	K	Joback Method
vc	0.625	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	541.05	J/molxK	864.48	Joback Method
cpg	596.45	J/molxK	1073.79	Joback Method
cpg	584.95	J/molxK	1031.93	Joback Method
cpg	573.85	J/molxK	990.07	Joback Method
cpg	562.96	J/molxK	948.20	Joback Method
cpg	552.09	J/molxK	906.34	Joback Method
cpg	608.54	J/molxK	1115.65	Joback Method
dvisc	0.0000005	Paxs	864.48	Joback Method
dvisc	0.0000008	Paxs	827.75	Joback Method

dvisc	0.0000012	Paxs	791.03	Joback Method
dvisc	0.0000018	Paxs	754.31	Joback Method
dvisc	0.0000029	Paxs	717.58	Joback Method
dvisc	0.0000049	Paxs	680.86	Joback Method
dvisc	0.0000089	Paxs	644.13	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C3046820&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci9903071
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

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

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