

2-[4-(1-Hydroxy-2-methylpropyl)phenyl]propanoic acid, dimethyl

InChI: InChI=1S/C15H22O3/c1-10(2)14(17-4)13-8-6-12(7-9-13)11(3)15(16)18-5/h6-11,14H,1-5H
InChIKey: WNKBIUUWCXJTCQ-UHFFFAOYSA-N

Formula: C15H22O3

SMILES: COC(=O)C(C)c1ccc(C(OC)C(C)C)cc1

Mol. weight [g/mol]: 250.33

Physical Properties

Property code	Value	Unit	Source
gf	-168.04	kJ/mol	Joback Method
hf	-520.73	kJ/mol	Joback Method
hfus	21.66	kJ/mol	Joback Method
hvap	62.32	kJ/mol	Joback Method
log10ws	-3.30		Crippen Method
logp	3.307		Crippen Method
mcvol	211.760	ml/mol	McGowan Method
pc	1908.57	kPa	Joback Method
rinpol	1610.00		NIST Webbook
rinpol	1610.00		NIST Webbook
tb	671.65	K	Joback Method
tc	879.13	K	Joback Method
tf	347.14	K	Joback Method
vc	0.791	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	575.43	J/molxK	671.65	Joback Method
cpg	651.52	J/molxK	844.55	Joback Method
cpg	638.28	J/molxK	809.97	Joback Method
cpg	624.07	J/molxK	775.39	Joback Method
cpg	608.86	J/molxK	740.81	Joback Method
cpg	592.65	J/molxK	706.23	Joback Method
cpg	663.79	J/molxK	879.13	Joback Method
dvisc	0.0000843	Paxs	671.65	Joback Method

dvisc	0.0001139	Paxs	617.57	Joback Method
dvisc	0.0001630	Paxs	563.48	Joback Method
dvisc	0.0002518	Paxs	509.40	Joback Method
dvisc	0.0004315	Paxs	455.31	Joback Method
dvisc	0.0008547	Paxs	401.23	Joback Method
dvisc	0.0020950	Paxs	347.14	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=R399485&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l

Legend

cp_g:	Ideal gas heat capacity
dvisc:	Dynamic viscosity
g_f:	Standard Gibbs free energy of formation
h_f:	Enthalpy of formation at standard conditions
h_{fus}:	Enthalpy of fusion at standard conditions
h_{vap}:	Enthalpy of vaporization at standard conditions
log₁₀w_s:	Log ₁₀ of Water solubility in mol/l
log_p:	Octanol/Water partition coefficient
mc_{vol}:	McGowan's characteristic volume
pc:	Critical Pressure
rin_{pol}:	Non-polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume

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