Benzenepropanoic acid, «beta»-phenyl-

Other names:	«beta»-Phenylbenzenepropanoic acid
	3,3-Diphenylpropionic acid
	«beta»,«beta»-Diphenylpropionic acid
	Diphenylpropionic acid
	Hydrocinnamic acid, «beta»-phenyl-
	Propionic acid, 3,3-diphenyl-
	3,3-Diphenylpropanoic acid
Inchi:	InChI=1S/C15H14O2/c16-15(17)11-14(12-7-3-1-4-8-12)13-9-5-2-6-10-13/h1-10,14H,11H
InchiKey:	BZQGAPWJKAYCHR-UHFFFAOYSA-N
Formula:	C15H14O2
SMILES:	O=C(O)CC(c1ccccc1)c1ccccc1
Mol. weight [g/mol]:	226.27
CAS:	606-83-7

Physical Properties

Property code	Value	Unit	Source
gf	32.06	kJ/mol	Joback Method
hf	-149.96	kJ/mol	Joback Method
hfus	24.85	kJ/mol	Joback Method
hvap	76.57	kJ/mol	Joback Method
log10ws	-3.47		Crippen Method
logp	3.293		Crippen Method
mcvol	182.130	ml/mol	McGowan Method
pc	2976.29	kPa	Joback Method
tb	741.57	K	Joback Method
tc	967.59	K	Joback Method
tf	407.40	K	Joback Method
vc	0.678	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	494.74	J/mol×K	741.57	Joback Method
cpg	507.54	J/mol×K	779.24	Joback Method

cpg	519.32	J/mol×K	816.91	Joback Method
cpg	530.15	J/mol×K	854.58	Joback Method
cpg	540.11	J/mol×K	892.25	Joback Method
cpg	549.26	J/mol×K	929.92	Joback Method
cpg	557.67	J/mol×K	967.59	Joback Method
dvisc	0.0022784	Pa×s	407.40	Joback Method
dvisc	0.0007435	Pa×s	463.10	Joback Method
dvisc	0.0003086	Pa×s	518.79	Joback Method
dvisc	0.0001519	Pa×s	574.49	Joback Method
dvisc	0.0000847	Pa×s	630.18	Joback Method
dvisc	0.0000520	Pa×s	685.88	Joback Method
dvisc	0.0000343	Pa×s	741.57	Joback Method

Sources

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=C606837&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws

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