

Benzeneacetic acid, «alpha»-cyclopentyl-

Other names:

«alpha»-Phenylcyclopentaneacetic acid

Cyclopentylphenylacetic acid

«alpha»-Cyclopentylphenylacetic acid

Acetic acid, cyclopentylphenyl-

Acetic acid, cyclopentyphenyl-

Cyclopentaneacetic acid, «alpha»-phenyl-

Inchi:

InChI=1S/C13H16O2/c14-13(15)12(11-8-4-5-9-11)10-6-2-1-3-7-10/h1-3,6-7,11-12H,4-5,8

InchiKey:

BCJIDGDYYYBNNB-UHFFFAOYSA-N

Formula:

C13H16O2

SMILES:

O=C(O)C(c1ccccc1)C1CCCC1

Mol. weight [g/mol]:

204.26

CAS:

3900-93-4

Physical Properties

Property code	Value	Unit	Source
gf	-60.64	kJ/mol	Joback Method
hf	-284.73	kJ/mol	Joback Method
hfus	19.57	kJ/mol	Joback Method
hvap	70.10	kJ/mol	Joback Method
log10ws	-3.08		Crippen Method
logp	3.045		Crippen Method
mcvol	166.850	ml/mol	McGowan Method
pc	3114.04	kPa	Joback Method
tb	684.41	K	Joback Method
tc	905.25	K	Joback Method
tf	369.34	K	Joback Method
vc	0.616	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	465.32	J/mol×K	684.41	Joback Method
cpg	530.13	J/mol×K	868.44	Joback Method
cpg	519.11	J/mol×K	831.64	Joback Method

cpg	507.19	J/molxK	794.83	Joback Method
cpg	494.29	J/molxK	758.02	Joback Method
cpg	480.35	J/molxK	721.22	Joback Method
cpg	540.30	J/molxK	905.25	Joback Method
dvisc	0.0000710	Paxs	684.41	Joback Method
dvisc	0.0001083	Paxs	631.90	Joback Method
dvisc	0.0001785	Paxs	579.39	Joback Method
dvisc	0.0003249	Paxs	526.88	Joback Method
dvisc	0.0006754	Paxs	474.36	Joback Method
dvisc	0.0016843	Paxs	421.85	Joback Method
dvisc	0.0054467	Paxs	369.34	Joback Method

Sources

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
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C3900934&Units=SI

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

Latest version available from:

<https://www.chemeo.com/cid/83-301-5/Benzeneacetic-acid-alpha-cyclopentyl.pdf>

Generated by Cheméo on 2024-05-01 20:07:11.41340869 +0000 UTC m=+16883280.333986005.

Cheméo (<https://www.chemeo.com>) is the biggest free database of chemical and physical data for the process industry.