

Propionic acid, 4-biphenyl ester

Inchi:	InChI=1S/C15H14O2/c1-2-15(16)17-14-10-8-13(9-11-14)12-6-4-3-5-7-12/h3-11H,2H2,1H
InchiKey:	UEKKNMHEJIWKDR-UHFFFAOYSA-N
Formula:	C15H14O2
SMILES:	CCC(=O)Oc1ccc(-c2ccccc2)cc1
Mol. weight [g/mol]:	226.27

Physical Properties

Property code	Value	Unit	Source
gf	56.69	kJ/mol	Joback Method
hf	-136.14	kJ/mol	Joback Method
hfus	25.09	kJ/mol	Joback Method
hvap	63.35	kJ/mol	Joback Method
log10ws	-4.81		Crippen Method
logp	3.669		Crippen Method
mcvol	182.130	ml/mol	McGowan Method
pc	2589.85	kPa	Joback Method
rinpol	1941.00		NIST Webbook
tb	677.23	K	Joback Method
tc	915.77	K	Joback Method
tf	396.33	K	Joback Method
vc	0.683	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	465.84	J/mol×K	677.23	Joback Method
cpg	481.42	J/mol×K	716.99	Joback Method
cpg	495.81	J/mol×K	756.74	Joback Method
cpg	509.05	J/mol×K	796.50	Joback Method
cpg	521.19	J/mol×K	836.25	Joback Method
cpg	532.27	J/mol×K	876.01	Joback Method
cpg	542.35	J/mol×K	915.77	Joback Method
dvisc	0.0012300	Pa×s	396.33	Joback Method
dvisc	0.0007015	Pa×s	443.15	Joback Method

dvisc	0.0004454	Pa×s	489.96	Joback Method
dvisc	0.0003061	Pa×s	536.78	Joback Method
dvisc	0.0002234	Pa×s	583.60	Joback Method
dvisc	0.0001709	Pa×s	630.41	Joback Method
dvisc	0.0001356	Pa×s	677.23	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=U360700&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws
Joback Method:	https://en.wikipedia.org/wiki/Joback_method

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
rinpol:	Non-polar retention indices
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/50-915-0/Propionic-acid-4-biphenyl-ester.pdf>

Generated by Cheméo on 2025-12-05 09:46:30.915822222 +0000 UTC m=+4676188.445862877.

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