3,3-Diphenyl-1-propanol

Other names: 2,3-diphenylpropanol
Inchi: InChI=1S/C15H16O/c16-12-11-15(13-7-3-1-4-8-13)14-9-5-2-6-10-14/h1-10,15-16H,11-12
InchiKey: IDCXQMVSIIJUEH-UHFFFAOYSA-N
Formula: C15H16O
SMILES: OCCC(c1ccccc1)c1ccccc1
Mol. weight [g/mol]: 212.29
CAS: 3536-29-6

Physical Properties

Property code	Value	Unit	Source
gf	160.98	kJ/mol	Joback Method
hf	-37.38	kJ/mol	Joback Method
hfus	23.25	kJ/mol	Joback Method
hvap	69.83	kJ/mol	Joback Method
log10ws	-3.64		Crippen Method
logp	3.201		Crippen Method
mcvol	180.560	ml/mol	McGowan Method
pc	2781.78	kPa	Joback Method
rinpol	1800.00		NIST Webbook
rinpol	1800.00		NIST Webbook
tb	687.70	K	Joback Method
tc	907.90	K	Joback Method
tf	357.47	K	Joback Method
vc	0.672	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	480.52	J/mol×K	687.70	Joback Method
cpg	495.10	J/mol×K	724.40	Joback Method
cpg	508.61	J/mol×K	761.10	Joback Method
cpg	521.13	J/mol×K	797.80	Joback Method
cpg	532.73	J/mol×K	834.50	Joback Method
cpg	543.47	J/mol×K	871.20	Joback Method

cpg	553.42	J/mol×K	907.90	Joback Method
dvisc	0.0045836	Pa×s	357.47	Joback Method
dvisc	0.0012196	Pa×s	412.51	Joback Method
dvisc	0.0004432	Pa×s	467.55	Joback Method
dvisc	0.0001993	Pa×s	522.59	Joback Method
dvisc	0.0001044	Pa×s	577.62	Joback Method
dvisc	0.0000612	Pa×s	632.66	Joback Method
dvisc	0.0000391	Pa×s	687.70	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C3536296&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
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
rinpol:	Non-polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume

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