

1,3-Diphenyl-2-propylpropane

Inchi:	InChI=1S/C18H22/c1-2-9-18(14-16-10-5-3-6-11-16)15-17-12-7-4-8-13-17/h3-8,10-13,18H
InchiKey:	DNFPIDCPAFVRPK-UHFFFAOYSA-N
Formula:	C18H22
SMILES:	CCCC(Cc1ccccc1)Cc1ccccc1
Mol. weight [g/mol]:	238.37
CAS:	62155-46-8

Physical Properties

Property code	Value	Unit	Source
chl	-9811.00	kJ/mol	NIST Webbook
gf	323.06	kJ/mol	Joback Method
hf	52.93	kJ/mol	Joback Method
hfus	26.94	kJ/mol	Joback Method
hvap	59.83	kJ/mol	Joback Method
log10ws	-5.32		Crippen Method
logp	4.888		Crippen Method
mcvol	216.960	ml/mol	McGowan Method
pc	1930.44	kPa	Joback Method
tb	664.16	K	Joback Method
tc	890.11	K	Joback Method
tf	330.46	K	Joback Method
vc	0.822	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	578.29	J/molxK	664.16	Joback Method
cpg	597.96	J/molxK	701.82	Joback Method
cpg	616.23	J/molxK	739.48	Joback Method
cpg	633.21	J/molxK	777.13	Joback Method
cpg	648.97	J/molxK	814.79	Joback Method
cpg	663.59	J/molxK	852.45	Joback Method
cpg	677.16	J/molxK	890.11	Joback Method
dvisc	0.0028308	Paxs	330.46	Joback Method

dvisc	0.0011284	Paxs	386.08	Joback Method
dvisc	0.0005670	Paxs	441.69	Joback Method
dvisc	0.0003323	Paxs	497.31	Joback Method
dvisc	0.0002169	Paxs	552.93	Joback Method
dvisc	0.0001530	Paxs	608.54	Joback Method
dvisc	0.0001145	Paxs	664.16	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C62155468&Units=SI
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

Legend

chl:	Standard liquid enthalpy of combustion
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

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