

2,5-Dimethyldiphenylmethane

Inchi:	InChI=1S/C15H16/c1-12-8-9-13(2)15(10-12)11-14-6-4-3-5-7-14/h3-10H,11H2,1-2H3
InchiKey:	LJBGURBFHJJQQU-UHFFFAOYSA-N
Formula:	C15H16
SMILES:	<chem>Cc1ccc(C)c(Cc2ccccc2)c1</chem>
Mol. weight [g/mol]:	196.29
CAS:	13540-50-6

Physical Properties

Property code	Value	Unit	Source
chl	-8213.90 ± 1.20	kJ/mol	NIST Webbook
gf	280.98	kJ/mol	Joback Method
hf	97.19	kJ/mol	Joback Method
hfl	24.60 ± 1.40	kJ/mol	NIST Webbook
hfus	21.91	kJ/mol	Joback Method
hvap	54.86	kJ/mol	Joback Method
log10ws	-4.52		Crippen Method
logp	3.894		Crippen Method
mcvol	174.690	ml/mol	McGowan Method
pc	2436.25	kPa	Joback Method
tb	568.00 ± 4.00	K	NIST Webbook
tb	567.20 ± 4.00	K	NIST Webbook
tc	842.62	K	Joback Method
tf	336.69	K	Joback Method
vc	0.659	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	421.04	J/molxK	605.92	Joback Method
cpg	438.73	J/molxK	645.37	Joback Method
cpg	455.19	J/molxK	684.82	Joback Method
cpg	470.49	J/molxK	724.27	Joback Method
cpg	484.68	J/molxK	763.72	Joback Method
cpg	497.83	J/molxK	803.17	Joback Method

cpg	510.01	J/molxK	842.62	Joback Method
dvisc	0.0014790	Paxs	336.69	Joback Method
dvisc	0.0008204	Paxs	381.56	Joback Method
dvisc	0.0005152	Paxs	426.43	Joback Method
dvisc	0.0003535	Paxs	471.31	Joback Method
dvisc	0.0002590	Paxs	516.18	Joback Method
dvisc	0.0001994	Paxs	561.05	Joback Method
dvisc	0.0001596	Paxs	605.92	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=C13540506&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci9903071
Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws

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
hfl:	Liquid phase 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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