Guanidine, N,N'-diphenyl-

Other names:	1,3-Difenylguanid
	1,3-diphenylguanidine
	Accelerator D
	Akrochem DPG
	D.P.G
	DFG
	DPG
	DPG accelerator
	Denax
	Denax DPG
	Dwufenyloguanidyna
	Melaniline
	N,N'-diphenylguanidine
	NCI-C60924
	NSC 3272
	Nocceler D
	Perkacit DPG
	Sanceler D
	Sym-diphenylguanidine
	USAF B-19
	USAF EK-1270
	Vanax DPG
	Vulcacid D
	Vulcafor DPG
	Vulcaid DPG
	Vulkacit D
	Vulkacit D/C
	Vulkacite D
	Vulkazit
	diphenylguanidine
	guanidine, 1,3-diphenyl-
	melanilne
	s-Diphenylguanidine
	soxinol D
	sym-diphenylguanidne
Inchi:	InChI=1S/C13H13N3/c14-13(15-11-7-3-1-4-8-11)16-12-9-5-2-6-10-12/h1-10H,(H3,14,15,
InchiKey:	OWRCNXZUPFZXOS-UHFFFAOYSA-N
Formula:	C13H13N3
SMILES:	N=C(Nc1ccccc1)Nc1ccccc1
Mol. weight [g/mol]:	211.26

CAS: 102-06-7

Physical Properties

Property code	Value	Unit	Source
gf	665.78	kJ/mol	Joback Method
hf	466.68	kJ/mol	Joback Method
hvap	74.04	kJ/mol	Joback Method
log10ws	-4.63		Crippen Method
logp	3.145		Crippen Method
mcvol	172.150	ml/mol	McGowan Method
tb	734.88	K	Joback Method
tf	421.15	K	Solubility determination and thermodynamic dissolution functions of 1,3-diphenylguanidine in nine organic solvents at evaluated temperatures

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	467.25	J/mol×K	734.88	Joback Method
cpg	24.31	J/mol×K	100.12	Joback Method
cpg	24.31	J/mol×K	100.12	Joback Method
cpg	24.31	J/mol×K	100.12	Joback Method
cpg	24.31	J/mol×K	100.12	Joback Method
cpg	24.31	J/mol×K	100.12	Joback Method
cpg	24.31	J/mol×K	100.12	Joback Method

Sources

Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws
Solubility determination and thermodynamic dissolution functions of 1,3-diphenylguanidine in nine organic solvents at evaluated temperatures:	https://www.doi.org/10.1016/j.jct.2016.03.011
Solubility of 2-Chlorophenylacetic Acid in 12 Pure Solvents from Te- (temperatures? to 318.15) K: Determination and Modeling:	https://www.doi.org/10.1021/acs.jced.8b00139
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=C102067&Units=SI

Legend

cpg:	Ideal gas heat capacity
gf:	Standard Gibbs free energy of formation
hf:	Enthalpy of formation 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
tb:	Normal Boiling Point Temperature
tf:	Normal melting (fusion) point