1,3-Cyclobutanediamine, n,n'-diphenyl-2,2,4,4-tetramethyl-

Inchi: InChI=1S/C20H26N2/c1-19(2)17(21-15-11-7-5-8-12-15)20(3,4)18(19)22-16-13-9-6-10-14

InchiKey: QJXQIRIBSXDMJF-UHFFFAOYSA-N

Formula: C20H26N2

SMILES: CC1(C)C(Nc2ccccc2)C(C)(C)C1Nc1ccccc1

Mol. weight [g/mol]: 294.43

CAS: 1445-33-6

Physical Properties

Property code	Value	Unit	Source
gf	535.66	kJ/mol	Joback Method
hf	159.97	kJ/mol	Joback Method
hfus	32.49	kJ/mol	Joback Method
hvap	74.39	kJ/mol	Joback Method
log10ws	-5.29		Crippen Method
logp	5.014		Crippen Method
mcvol	254.240	ml/mol	McGowan Method
pc	1883.80	kPa	Joback Method
tb	808.18	K	Joback Method
tc	1054.01	K	Joback Method
tf	522.82	K	Joback Method
vc	0.952	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	797.30	J/mol×K	808.18	Joback Method
cpg	819.85	J/mol×K	849.15	Joback Method
cpg	842.20	J/mol×K	890.12	Joback Method
cpg	864.74	J/mol×K	931.10	Joback Method
cpg	887.81	J/mol×K	972.07	Joback Method
cpg	911.78	J/mol×K	1013.04	Joback Method
cpg	937.02	J/mol×K	1054.01	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C1445336&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
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