N,N'-Bis-(4-methoxyphenyl)urea

Other names: N,N'-(Di-p-methoxyphenyl)urea
Inchi: InChI=1S/C15H16N2O3/c1-19-13-7-3-11(4-8-13)16-15(18)17-12-5-9-14(20-2)10-6-12/h3
InchiKey: CPSIMDUNVYMPAH-UHFFFAOYSA-N
Formula: C15H16N2O3
SMILES: COc1ccc(NC(=O)Nc2ccc(OC)cc2)cc1
Mol. weight [g/mol]: 272.30
CAS: 1227-44-7

Physical Properties

Property code	Value	Unit	Source
gf	120.84	kJ/mol	Joback Method
hf	-172.89	kJ/mol	Joback Method
hfus	36.08	kJ/mol	Joback Method
hvap	79.30	kJ/mol	Joback Method
log10ws	-3.71		Crippen Method
logp	3.348		Crippen Method
mcvol	207.960	ml/mol	McGowan Method
pc	2574.11	kPa	Joback Method
tb	804.97	K	Joback Method
tc	1036.74	K	Joback Method
tf	536.40	K	Joback Method
vc	0.771	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	594.79	J/mol×K	804.97	Joback Method
cpg	608.05	J/mol×K	843.60	Joback Method
cpg	620.12	J/mol×K	882.23	Joback Method
cpg	631.03	J/mol×K	920.85	Joback Method
cpg	640.81	J/mol×K	959.48	Joback Method
cpg	649.46	J/mol×K	998.11	Joback Method
cpg	657.03	J/mol×K	1036.74	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C1227447&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