N-(2-Hydroxyethyl)-N',N'-diphenyl urea

Inchi: InChI=1S/C15H16N2O2/c18-12-11-16-15(19)17(13-7-3-1-4-8-13)14-9-5-2-6-10-14/h1-10
InchiKey: MTNIIWYHKGRXAD-UHFFFAOYSA-N
Formula: C15H16N2O2
SMILES: O=C(NCCO)N(c1ccccc1)c1ccccc1
Mol. weight [g/mol]: 256.30
CAS: 6123-87-1

Physical Properties

Property code	Value	Unit	Source
chs	-7870.10 ± 7.50	kJ/mol	NIST Webbook
gf	234.67	kJ/mol	Joback Method
hf	-23.68	kJ/mol	Joback Method
hfs	-319.20 ± 7.50	kJ/mol	NIST Webbook
hfus	36.49	kJ/mol	Joback Method
hvap	85.44	kJ/mol	Joback Method
log10ws	-3.22		Crippen Method
logp	2.527		Crippen Method
mcvol	202.090	ml/mol	McGowan Method
pc	2986.06	kPa	Joback Method
tb	804.62	K	Joback Method
tc	1023.73	K	Joback Method
tf	507.53	K	Joback Method
vc	0.738	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	584.54	J/mol×K	804.62	Joback Method
cpg	596.54	J/mol×K	841.14	Joback Method
cpg	607.59	J/mol×K	877.66	Joback Method
cpg	617.78	J/mol×K	914.17	Joback Method
cpg	627.17	J/mol×K	950.69	Joback Method
cpg	635.86	J/mol×K	987.21	Joback Method
cpg	643.92	J/mol×K	1023.73	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C6123871&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

chs:	Standard solid enthalpy of combustion
cpg:	Ideal gas heat capacity
gf:	Standard Gibbs free energy of formation
hf:	Enthalpy of formation at standard conditions
hfs:	Solid 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