Urea, N,N-diphenyl-N'-propyl-

Inchi: InChI=1S/C16H18N2O/c1-2-13-17-16(19)18(14-9-5-3-6-10-14)15-11-7-4-8-12-15/h3-12H
InchiKey: AQSVPWZCACWAPT-UHFFFAOYSA-N
Formula: C16H18N2O
SMILES: CCCNC(=O)N(c1ccccc1)c1ccccc1
Mol. weight [g/mol]: 254.33

Physical Properties

Property code	Value	Unit	Source
gf	379.91	kJ/mol	Joback Method
hf	107.91	kJ/mol	Joback Method
hfus	35.00	kJ/mol	Joback Method
hvap	70.99	kJ/mol	Joback Method
log10ws	-4.37		Crippen Method
logp	3.944		Crippen Method
mcvol	210.310	ml/mol	McGowan Method
pc	2455.60	kPa	Joback Method
rinpol	2179.00		NIST Webbook
rinpol	2179.00		NIST Webbook
tb	735.32	K	Joback Method
tc	965.88	K	Joback Method
tf	457.98	K	Joback Method
vc	0.774	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	585.44	J/mol×K	735.32	Joback Method
cpg	601.23	J/mol×K	773.75	Joback Method
cpg	615.76	J/mol×K	812.17	Joback Method
cpg	629.12	J/mol×K	850.60	Joback Method
cpg	641.41	J/mol×K	889.02	Joback Method
cpg	652.70	J/mol×K	927.45	Joback Method
cpg	663.11	J/mol×K	965.88	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=U407547&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
McGowan Method:	http://link.springer.com/article/10.1007/BF02311772

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
rinpol:	Non-polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume