N,N-Dimethyl-N'-m-methylphenylurea

Inchi: InChI=1S/C10H14N2O/c1-8-5-4-6-9(7-8)11-10(13)12(2)3/h4-7H,1-3H3,(H,11,13)
InchiKey: JUMFQCKSVYYQJC-UHFFFAOYSA-N
Formula: C10H14N2O
SMILES: Cc1cccc(NC(=O)N(C)C)c1
Mol. weight [g/mol]: 178.23
CAS: 28170-41-4

Physical Properties

Property code	Value	Unit	Source
gf	207.35	kJ/mol	Joback Method
hf	-16.25	kJ/mol	Joback Method
hfus	25.03	kJ/mol	Joback Method
hvap	56.02	kJ/mol	Joback Method
log10ws	-2.12		Crippen Method
logp	2.089		Crippen Method
mcvol	149.530	ml/mol	McGowan Method
pc	3127.99	kPa	Joback Method
tb	576.34	K	Joback Method
tc	789.36	K	Joback Method
tf	376.46	K	Joback Method
vc	0.546	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	358.79	J/mol×K	576.34	Joback Method
cpg	372.94	J/mol×K	611.84	Joback Method
cpg	386.20	J/mol×K	647.35	Joback Method
cpg	398.60	J/mol×K	682.85	Joback Method
cpg	410.18	J/mol×K	718.35	Joback Method
cpg	420.97	J/mol×K	753.86	Joback Method
cpg	431.03	J/mol×K	789.36	Joback Method

Sources

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=C28170414&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws

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