1,2-Di-(m-toluoyl)-hydrazine

Inchi: InChI=1S/C16H16N2O2/c1-11-5-3-7-13(9-11)15(19)17-18-16(20)14-8-4-6-12(2)10-14/h3
InchiKey: GYFCOKOXDQWIOA-UHFFFAOYSA-N
Formula: C16H16N2O2
SMILES: Cc1cccc(C(=O)NNC(=O)c2cccc(C)c2)c1
Mol. weight [g/mol]: 268.31
CAS: 59646-36-5

Physical Properties

Property code	Value	Unit	Source
gf	210.34	kJ/mol	Joback Method
hf	-41.67	kJ/mol	Joback Method
hfus	37.90	kJ/mol	Joback Method
hvap	83.45	kJ/mol	Joback Method
log10ws	-4.91		Crippen Method
logp	2.378		Crippen Method
mcvol	211.880	ml/mol	McGowan Method
pc	2576.72	kPa	Joback Method
tb	836.88	K	Joback Method
tc	1075.41	K	Joback Method
tf	553.14	K	Joback Method
vc	0.797	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	608.57	J/mol×K	836.88	Joback Method
cpg	621.16	J/mol×K	876.64	Joback Method
cpg	632.65	J/mol×K	916.39	Joback Method
cpg	643.09	J/mol×K	956.15	Joback Method
cpg	652.55	J/mol×K	995.90	Joback Method
cpg	661.10	J/mol×K	1035.66	Joback Method
cpg	668.82	J/mol×K	1075.41	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C59646365&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

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