3,5-di(Trifluoromethyl)phenylhydrazine

Other names: 3,5-Bis(trifluoromethyl)phenylhydrazine
Inchi: InChI=1S/C8H6F6N2/c9-7(10,11)4-1-5(8(12,13)14)3-6(2-4)16-15/h1-3,16H,15H2
InchiKey: OULWACKZBGBRNT-UHFFFAOYSA-N
Formula: C8H6F6N2
SMILES: NNc1cc(C(F)(F)F)cc(C(F)(F)F)c1
Mol. weight [g/mol]: 244.14
CAS: 886-35-1

Physical Properties

Property code	Value	Unit	Source
gf	-897.71	kJ/mol	Joback Method
hf	-1101.76	kJ/mol	Joback Method
hfus	23.69	kJ/mol	Joback Method
hvap	46.58	kJ/mol	Joback Method
log10ws	-3.69		Crippen Method
logp	3.010		Crippen Method
mcvol	130.400	ml/mol	McGowan Method
pc	2931.34	kPa	Joback Method
tb	530.94	K	Joback Method
tc	719.69	K	Joback Method
tf	375.68	K	Joback Method
vc	0.525	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	329.35	J/mol×K	530.94	Joback Method
cpg	339.95	J/mol×K	562.40	Joback Method
cpg	349.76	J/mol×K	593.86	Joback Method
cpg	358.80	J/mol×K	625.32	Joback Method
cpg	367.14	J/mol×K	656.77	Joback Method
cpg	374.82	J/mol×K	688.23	Joback Method
cpg	381.89	J/mol×K	719.69	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C886351&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