m-Trifluoromethylphenylhydrazine

Other names:	2-Trifluoromethylphenylhydrazine
	Hydrazine, [2-(trifluoromethyl)phenyl]-
	2-trifluormethylphenylhydrazine
Inchi:	InChI=1S/C7H7F3N2/c8-7(9,10)5-3-1-2-4-6(5)12-11/h1-4,12H,11H2
InchiKey:	JSWQDLBFVSTSIW-UHFFFAOYSA-N
Formula:	C7H7F3N2
SMILES:	NNc1ccccc1C(F)(F)F
Mol. weight [g/mol]:	176.14
CAS:	365-34-4

Physical Properties

Property code	Value	Unit	Source
gf	-314.91	kJ/mol	Joback Method
hf	-472.57	kJ/mol	Joback Method
hfus	19.66	kJ/mol	Joback Method
hvap	47.44	kJ/mol	Joback Method
log10ws	-2.59		Crippen Method
logp	1.991		Crippen Method
mcvol	111.000	ml/mol	McGowan Method
pc	3810.39	kPa	Joback Method
tb	508.50	K	Joback Method
tc	716.52	K	Joback Method
tf	347.70	K	Joback Method
vc	0.426	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	257.97	J/mol×K	508.50	Joback Method
cpg	268.88	J/mol×K	543.17	Joback Method
cpg	278.98	J/mol×K	577.84	Joback Method
cpg	288.31	J/mol×K	612.51	Joback Method
cpg	296.93	J/mol×K	647.18	Joback Method
cpg	304.88	J/mol×K	681.85	Joback Method

cpg	312.20	J/mol×K	716.52	Joback Method

Sources

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
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C365344&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l

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