Imidosulfurous difluoride, (fluorocarbonyl)-

Other names: Imidosulfurous difluoride, (fluoroformyl)-
N-Fluoroformyl iminosulfur difluoride
S,S-difluoro-N-(fluoroformyl)-sulfimine
Inchi: InChI=1S/CF3NOS/c2-1(6)5-7(3)4
InchiKey: KVNVOUIZJYPKAF-UHFFFAOYSA-N
Formula: CF3NOS
SMILES: O=C(F)N=S(F)F
Mol. weight [g/mol]: 131.08
CAS: 3855-41-2

Physical Properties

Property code	Value	Unit	Source
hf	-755.21	kJ/mol	Joback Method
hvap	32.41	kJ/mol	Joback Method
log10ws	-0.65		Crippen Method
logp	1.647		Crippen Method
mcvol	58.160	ml/mol	McGowan Method
pc	4194.74	kPa	Joback Method
tb	418.04	K	Joback Method
tc	617.42	K	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
hvapt	37.30	kJ/mol	271.50	NIST Webbook

Sources

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
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C3855412&Units=SI

Legend

hf:	Enthalpy of formation at standard conditions
hvap:	Enthalpy of vaporization at standard conditions
hvapt:	Enthalpy of vaporization at a given temperature
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