

Imidosulfurous difluoride, methyl-

Other names:	Methylimidodosulfurous difluoride Sulfilimine, S,S-difluoro-N-methyl-
Inchi:	InChI=1S/CH3F2NS/c1-4-5(2)3/h1H3
InchiKey:	NMNSZWXIEHDZQK-UHFFFAOYSA-N
Formula:	CH3F2NS
SMILES:	CN=S(F)F
Mol. weight [g/mol]:	99.10
CAS:	758-20-3

Physical Properties

Property code	Value	Unit	Source
hf	-446.52	kJ/mol	Joback Method
hvap	26.48	kJ/mol	Joback Method
log10ws	-0.05		Crippen Method
logp	1.187		Crippen Method
mcvol	54.820	ml/mol	McGowan Method
pc	4098.62	kPa	Joback Method
tb	364.90	K	Joback Method
tc	561.65	K	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
hvapt	28.70	kJ/mol	226.00	NIST Webbook
hvapt	28.60	kJ/mol	226.00	NIST Webbook

Correlations

Information	Value
Property code	pvap
Equation	$\ln(P_{vp}) = A + B/(T + C)$

Coeff. A	1.65273e+01
Coeff. B	-3.45033e+03
Temperature range (K), min.	194.00
Temperature range (K), max.	307.63

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C758203&Units=SI
The Yaws Handbook of Vapor Pressure:	https://www.sciencedirect.com/book/9780128029992/the-yaws-handbook-of-vapor-pressure
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci9903071
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

Legend

hf:	Enthalpy of formation at standard conditions
h_{vap}:	Enthalpy of vaporization at standard conditions
h_{vapt}:	Enthalpy of vaporization at a given temperature
log₁₀ws:	Log ₁₀ of Water solubility in mol/l
log_p:	Octanol/Water partition coefficient
m_{cvol}:	McGowan's characteristic volume
pc:	Critical Pressure
p_{vap}:	Vapor pressure
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature

Latest version available from:

<https://www.chemeo.com/cid/88-471-2/lmidosulfurous-difluoride-methyl.pdf>

Generated by Cheméo on 2024-04-25 22:14:52.335943606 +0000 UTC m=+16372541.256520918.

Cheméo (<https://www.chemeo.com>) is the biggest free database of chemical and physical data for the process industry.