

Nitrogen fluoride, (E)-

Other names:	(E)-Difluorodiazene trans-Difluorodiazene trans-1,2-Difluorodiazene trans-1,2-Difluorodiimide (E)-N ₂ F ₂ Nitrogen fluoride, trans FNNF Nitrogen fluoride (N ₂ F ₂), (E)- Difluorodiazene, (E)- Dinitrogen difluoride, (E)-
Inchi:	InChI=1S/F2N2/c1-3-4-2/b4-3+
InchiKey:	DUQAODNTUBJRGF-ONEGZZNKSA-N
Formula:	F ₂ N ₂
SMILES:	FN=NF
Mol. weight [g/mol]:	66.01
CAS:	13776-62-0

Physical Properties

Property code	Value	Unit	Source
hf	-388.33	kJ/mol	Joback Method
h _{vap}	20.63	kJ/mol	Joback Method
ie	12.80	eV	NIST Webbook
ie	12.80	eV	NIST Webbook
ie	13.10 ± 0.10	eV	NIST Webbook
log ₁₀ ws	-0.77		Crippen Method
logp	1.208		Crippen Method
m _{cvol}	30.060	ml/mol	McGowan Method
pc	4056.96	kPa	Joback Method
tb	161.80 ± 0.70	K	NIST Webbook
tc	260.00 ± 3.00	K	NIST Webbook
tf	101.00 ± 2.00	K	NIST Webbook

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C13776620&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

hf:	Enthalpy of formation at standard conditions
h_{vap}:	Enthalpy of vaporization at standard conditions
ie:	Ionization energy
log₁₀ws:	Log ₁₀ of Water solubility in mol/l
log_p:	Octanol/Water partition coefficient
m_{cvol}:	McGowan's characteristic volume
pc:	Critical Pressure
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point

Latest version available from:

<https://www.chemeo.com/cid/71-192-0/Nitrogen-fluoride-E.pdf>

Generated by Cheméo on 2024-04-19 01:57:30.964098126 +0000 UTC m=+15781099.884675438.

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