

Uranium hexafluoride

Other names:	Hexafluorouranium UF6 UN 2977 UN 2978 Uranium fluoride Uranium fluoride (238UF6) Uranium fluoride (UF6) Uranium fluoride (UF6), (OC-6-11)- Uranium-238 hexafluoride
Inchi:	InChI=1S/6FH.U/h6*1H;/q;,,,,;+6/p-6
InchiKey:	SANRKQGLYCLAFE-UHFFFAOYSA-H
Formula:	F6U
SMILES:	F[U](F)(F)(F)(F)F
Mol. weight [g/mol]:	352.02
CAS:	7783-81-5

Physical Properties

Property code	Value	Unit	Source
ea	5.06 ± 0.20	eV	NIST Webbook
ea	5.51 ± 0.31	eV	NIST Webbook
ea	5.13 ± 0.31	eV	NIST Webbook
ea	5.10	eV	NIST Webbook
ea	4.90 ± 0.50	eV	NIST Webbook
ea	6.33 ± 0.50	eV	NIST Webbook
ea	5.98 ± 0.43	eV	NIST Webbook
ea	5.50	eV	NIST Webbook
ea	3.61	eV	NIST Webbook
ea	4.30 ± 0.40	eV	NIST Webbook
ea	2.91	eV	NIST Webbook
ie	14.00 ± 0.10	eV	NIST Webbook
ie	14.14	eV	NIST Webbook

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
hvapt	29.50	kJ/mol	363.00	NIST Webbook

Correlations

Information	Value
Property code	pvap
Equation	$\ln(P_{vp}) = A + B/(T + C)$
Coeff. A	1.75028e+01
Coeff. B	-3.61247e+03
Coeff. C	-4.92800e+01
Temperature range (K), min.	234.35
Temperature range (K), max.	329.65

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C7783815&Units=SI
The Yaws Handbook of Vapor Pressure:	https://www.sciencedirect.com/book/9780128029992/the-yaws-handbook-of-vapor-pressure

Legend

ea:	Electron affinity
hvapt:	Enthalpy of vaporization at a given temperature
ie:	Ionization energy
pvap:	Vapor pressure

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