

Hafnium

Other names:	hafnium element
Inchi:	InChI=1S/Hf
InchiKey:	VBJZVLUMGGDVMO-UHFFFAOYSA-N
Formula:	Hf
SMILES:	[Hf]
Mol. weight [g/mol]:	178.49
CAS:	7440-58-6

Physical Properties

Property code	Value	Unit	Source
hf	378.84	kJ/mol	Cheméo Relay (1.0)
ie	6.83 ± 0.00	eV	NIST Webbook
ie	6.83	eV	NIST Webbook
ie	6.83 ± 0.00	eV	NIST Webbook
ie	6.65 ± 0.10	eV	NIST Webbook
ie	6.70 ± 0.10	eV	NIST Webbook
tt	2004.00	K	Thermophysical Properties of Solid Phase Hafnium at High Temperatures

Correlations

Information	Value
Property code	pvap
Equation	ln(Pvp) = A + B/(T + C)
Coeff. A	1.88577e+01
Coeff. B	-6.96139e+04
Coeff. C	1.26700e+01
Temperature range (K), min.	2689.15
Temperature range (K), max.	4876.15

Sources

The Yaws Handbook of Vapor
Pressure:
NIST Webbook:

<https://www.sciencedirect.com/book/9780128029992/the-yaws-handbook-of-vapor-pressure>

<http://webbook.nist.gov/cgi/cbook.cgi?ID=C7440586&Units=SI>

Cheméo Relay (1.0):

Cheméo Relay (1.0, beta):

Thermophysical Properties of Solid
Phase Hafnium at High Temperatures:
Thermodynamic modeling of the Co Hf
system supported by key experiments
and first-principles calculations:

<https://www.doi.org/10.1007/s10765-006-0045-2>

<https://www.doi.org/10.1016/j.tca.2015.04.004>

Legend

hf: Enthalpy of formation at standard conditions

ie: Ionization energy

pvap: Vapor pressure

tt: Triple Point Temperature

Latest version available from:

<https://www.chemeo.com/cid/57-600-2/Hafnium.pdf>

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