

europium

Inchi: InChI=1S/Eu
InchiKey: OGPBJKLSAFTDLK-UHFFFAOYSA-N
Formula: Eu
SMILES: [Eu]
Mol. weight [g/mol]: 151.96
CAS: 7440-53-1

Physical Properties

Property code	Value	Unit	Source
ie	5.67 ± 0.00	eV	NIST Webbook
ie	5.67	eV	NIST Webbook
ie	6.00 ± 0.50	eV	NIST Webbook
ie	5.70 ± 0.50	eV	NIST Webbook
ie	5.90 ± 0.50	eV	NIST Webbook
ie	5.67 ± 0.00	eV	NIST Webbook
ie	5.67 ± 0.00	eV	NIST Webbook
ie	5.67 ± 0.00	eV	NIST Webbook
ie	5.67 ± 0.00	eV	NIST Webbook
ie	5.50	eV	NIST Webbook
ie	5.70 ± 0.10	eV	NIST Webbook
ie	5.67 ± 0.00	eV	NIST Webbook
ie	5.60 ± 0.50	eV	NIST Webbook
ie	5.66 ± 0.01	eV	NIST Webbook
ie	5.90 ± 0.20	eV	NIST Webbook
ie	5.67 ± 0.01	eV	NIST Webbook
ie	5.64 ± 0.05	eV	NIST Webbook
ie	5.61 ± 0.10	eV	NIST Webbook
ie	5.68 ± 0.02	eV	NIST Webbook
ie	5.68 ± 0.03	eV	NIST Webbook

Correlations

Information	Value
Property code	pvap

Equation	$\ln(P_{vp}) = A + B/(T + C)$
Coeff. A	1.36545e+01
Coeff. B	-1.50794e+04
Coeff. C	-1.29800e+02
Temperature range (K), min.	863.15
Temperature range (K), max.	1796.15

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C7440531&Units=SI
The Yaws Handbook of Vapor Pressure:	https://www.sciencedirect.com/book/9780128029992/the-yaws-handbook-of-vapor-pressure
Thermochemistry of La _{1-x} Ln _x PO ₄ -monazites (Ln = Gd, Eu): Investigation in the variation of Gibbs energy of formation of RE ₆ UO ₁₂ (RE = Eu, Tb, Dy, Ho, Er, Yb, Lu) along the 4 th series:	https://www.doi.org/10.1016/j.jct.2016.11.003
Enthalpies of formation of Ln ₂ Fe ₃ Mo ₃ (Ln = La, Ce, Pr, Nd, Sm, Eu, Gd, Tb, Dy, Ho, Er, Yb, Lu) along the 4 th series:	https://www.doi.org/10.1016/j.jct.2019.06.030
Thermodynamics of Decomposition Equilibria:	https://www.doi.org/10.1016/j.tca.2012.09.036

Legend

ie:	Ionization energy
pvap:	Vapor pressure

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