

dysprosium

Inchi: InChI=1S/Dy
InchiKey: KBQHZAAAGSGFKK-UHFFFAOYSA-N
Formula: Dy
SMILES: [Dy]
Mol. weight [g/mol]: 162.50
CAS: 7429-91-6

Physical Properties

Property code	Value	Unit	Source
ie	5.94 ± 0.00	eV	NIST Webbook
ie	5.94 ± 0.00	eV	NIST Webbook
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ie	5.94 ± 0.00	eV	NIST Webbook
ie	5.94 ± 0.00	eV	NIST Webbook
ie	5.94 ± 0.00	eV	NIST Webbook
ie	5.90 ± 0.10	eV	NIST Webbook
ie	5.82 ± 0.03	eV	NIST Webbook
ie	5.72 ± 0.10	eV	NIST Webbook
ie	5.78 ± 0.10	eV	NIST Webbook
ie	5.93 ± 0.02	eV	NIST Webbook
ie	5.80 ± 0.02	eV	NIST Webbook

Correlations

Information	Value
Property code	pvap
Equation	$\ln(P_{vp}) = A + B/(T + C)$
Coeff. A	1.33591e+01
Coeff. B	-2.24700e+04
Coeff. C	-2.69450e+02
Temperature range (K), min.	1378.15
Temperature range (K), max.	2840.15

Sources

- Thermodynamic studies on LnCoO₃(s) (Ln = Dy, Ho) by solid-state electrochemical cells: <https://www.doi.org/10.1016/j.tca.2008.09.023>
- NIST Webbook: <http://webbook.nist.gov/cgi/cbook.cgi?ID=C7429916&Units=SI>
- The Yaws Handbook of Vapor Pressure: <https://www.sciencedirect.com/book/9780128029992/the-yaws-handbook-of-vapor-pressure>
- Thermodynamic measurement of Dy + Fe binary system by double Knudsen effusion: <https://www.doi.org/10.1016/j.jct.2013.05.034>
- Thermodynamic stability of RNi₂ Laves phases: <https://www.doi.org/10.1016/j.jct.2013.05.044>
- Investigation in the variation of Gibbs energy of formation of RE₆UO₁₂ (RE = La, Nd, Sm, Eu, Gd, Tb, Dy, Ho, Tm, Yb, Lu) along the 4f series: <https://www.doi.org/10.1016/j.jct.2019.06.030>

Legend

ie: Ionization energy

pvap: Vapor pressure

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