

# Praseodymium

**Inchi:** InChI=1S/Pr  
**InchiKey:** PUDIUYLPXJFUGB-UHFFFAOYSA-N  
**Formula:** Pr  
**SMILES:** [Pr]  
**Mol. weight [g/mol]:** 140.91  
**CAS:** 7440-10-0

## Physical Properties

| Property code | Value       | Unit | Source       |
|---------------|-------------|------|--------------|
| ie            | 5.46 ± 0.01 | eV   | NIST Webbook |
| ie            | 5.46        | eV   | NIST Webbook |
| ie            | 5.46        | eV   | NIST Webbook |
| ie            | 5.46 ± 0.01 | eV   | NIST Webbook |
| ie            | 5.46 ± 0.01 | eV   | NIST Webbook |
| ie            | 5.40 ± 0.10 | eV   | NIST Webbook |
| ie            | 5.40 ± 0.05 | eV   | NIST Webbook |
| ie            | 5.61 ± 0.12 | eV   | NIST Webbook |
| ie            | 5.42 ± 0.02 | eV   | NIST Webbook |
| ie            | 5.60 ± 0.20 | eV   | NIST Webbook |
| ie            | 5.48 ± 0.01 | eV   | NIST Webbook |

## Correlations

| Information                 | Value                   |
|-----------------------------|-------------------------|
| Property code               | pvap                    |
| Equation                    | ln(Pvp) = A + B/(T + C) |
| Coeff. A                    | 1.35980e+01             |
| Coeff. B                    | -3.23070e+04            |
| Coeff. C                    | -1.95350e+02            |
| Temperature range (K), min. | 1770.85                 |
| Temperature range (K), max. | 3793.15                 |

# Sources

Cheméo Relay (1.0):

Cheméo Relay (1.0, beta):

Thermodynamic stability of RNi<sub>2</sub> Laves phases: <https://www.doi.org/10.1016/j.jct.2013.05.044>

The Yaws Handbook of Vapor Pressure: <https://www.sciencedirect.com/book/9780128029992/the-yaws-handbook-of-vapor-pressure>

NIST Webbook: <http://webbook.nist.gov/cgi/cbook.cgi?ID=C7440100&Units=SI>

## Legend

**ie:** Ionization energy

**pvap:** Vapor pressure

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