

# beryllium

|                      |                             |
|----------------------|-----------------------------|
| Inchi:               | InChI=1S/Be                 |
| InchiKey:            | ATBAMAFKBVZNFJ-UHFFFAOYSA-N |
| Formula:             | Be                          |
| SMILES:              | [Be]                        |
| Mol. weight [g/mol]: | 9.01                        |
| CAS:                 | 7440-41-7                   |

## Physical Properties

| Property code | Value         | Unit    | Source       |
|---------------|---------------|---------|--------------|
| hf            | 324.00 ± 5.00 | kJ/mol  | NIST Webbook |
| ie            | 9.32          | eV      | NIST Webbook |
| ie            | 9.32          | eV      | NIST Webbook |
| ie            | 9.32          | eV      | NIST Webbook |
| ie            | 9.20 ± 1.00   | eV      | NIST Webbook |
| ie            | 9.32          | eV      | NIST Webbook |
| ie            | 9.40 ± 0.20   | eV      | NIST Webbook |
| sgb           | 136.28 ± 0.00 | J/mol×K | NIST Webbook |
| ss            | 9.50 ± 0.08   | J/mol×K | NIST Webbook |

## Correlations

| Information                 | Value                   |
|-----------------------------|-------------------------|
| Property code               | pvap                    |
| Equation                    | ln(Pvp) = A + B/(T + C) |
| Coeff. A                    | 1.65990e+01             |
| Coeff. B                    | -3.15376e+04            |
| Coeff. C                    | -1.24630e+02            |
| Temperature range (K), min. | 1097.00                 |
| Temperature range (K), max. | 2757.00                 |

# Sources

NIST Webbook:

<http://webbook.nist.gov/cgi/cbook.cgi?ID=C7440417&Units=SI>

The Yaws Handbook of Vapor Pressure:

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

## Legend

|              |                                                  |
|--------------|--------------------------------------------------|
| <b>hf:</b>   | Enthalpy of formation at standard conditions     |
| <b>ie:</b>   | Ionization energy                                |
| <b>pvap:</b> | Vapor pressure                                   |
| <b>sgb:</b>  | Molar entropy at standard conditions (1 bar)     |
| <b>ss:</b>   | Solid phase molar entropy at standard conditions |

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