

barium oxide, obtained by calcining witherite

Other names:	Barium monoxide barium oxide
Inchi:	InChI=1S/Ba.O
InchiKey:	QVQLCTNNEUAWMS-UHFFFAOYSA-N
Formula:	BaO
SMILES:	O=[Ba]
Mol. weight [g/mol]:	153.33
CAS:	1304-28-5

Physical Properties

Property code	Value	Unit	Source
affp	1215.40	kJ/mol	NIST Webbook
basg	1187.60	kJ/mol	NIST Webbook
ie	6.90 ± 0.10	eV	NIST Webbook
ie	6.91	eV	NIST Webbook
ie	6.50 ± 0.15	eV	NIST Webbook
ie	6.46 ± 0.07	eV	NIST Webbook
ie	6.80 ± 0.20	eV	NIST Webbook
ie	6.46 ± 0.07	eV	NIST Webbook
ie	6.50 ± 0.20	eV	NIST Webbook
ie	7.00 ± 1.00	eV	NIST Webbook
ie	6.97 ± 0.12	eV	NIST Webbook
ie	6.80 ± 0.50	eV	NIST Webbook
ie	6.50 ± 0.30	eV	NIST Webbook
ie	6.89 ± 0.03	eV	NIST Webbook

Correlations

Information	Value
Property code	pvap
Equation	$\ln(P_{vp}) = A + B/(T + C)$
Coeff. A	2.68019e+01
Coeff. B	-5.04266e+04
Temperature range (K), min.	2223.15

Sources

NIST Webbook:

<http://webbook.nist.gov/cgi/cbook.cgi?ID=C1304285&Units=SI>

The Yaws Handbook of Vapor Pressure:

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

Legend

affp:	Proton affinity
basg:	Gas basicity
ie:	Ionization energy
pvap:	Vapor pressure

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