

silver chloride

Other names:	silver monochloride silver(I) chloride
Inchi:	InChI=1S/Ag.ClH/h;1H/q+1;/p-1
InchiKey:	HKZLPVFGJNLROG-UHFFFAOYSA-M
Formula:	AgCl
SMILES:	Cl[Ag]
Mol. weight [g/mol]:	143.32
CAS:	7783-90-6

Physical Properties

Property code	Value	Unit	Source
hfs	-127.01 ± 0.05	kJ/mol	NIST Webbook
hfus	13.16	kJ/mol	Thermodynamic Properties of AgCl and AgBr
ie	11.30 ± 0.50	eV	NIST Webbook
ie	10.30 ± 0.40	eV	NIST Webbook
ie	10.50 ± 0.30	eV	NIST Webbook
ie	10.08	eV	NIST Webbook
ie	10.14	eV	NIST Webbook
ie	10.80 ± 0.40	eV	NIST Webbook
ss	96.25 ± 0.20	J/mol×K	NIST Webbook

Correlations

Information	Value
Property code	pvap
Equation	$\ln(P_{vp}) = A + B/(T + C)$
Coeff. A	1.78275e+01
Coeff. B	-2.51385e+04
Coeff. C	8.29600e+01
Temperature range (K), min.	1185.15
Temperature range (K), max.	1820.15

Sources

The Yaws Handbook of Vapor Pressure: <https://www.sciencedirect.com/book/9780128029992/the-yaws-handbook-of-vapor-pressure>
Thermodynamic Properties of AgCl and AgBr: <https://www.doi.org/10.1021/je700668b>
NIST Webbook: <http://webbook.nist.gov/cgi/cbook.cgi?ID=C7783906&Units=SI>

Legend

hfs: Solid phase enthalpy of formation at standard conditions
hfus: Enthalpy of fusion at standard conditions
ie: Ionization energy
pvap: Vapor pressure
ss: Solid phase molar entropy at standard conditions

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