

Rubidium fluoride

Other names:	rubidium fluoride (RbF) rubidium monofluoride
Inchi:	InChI=1S/FH.Rb/h1H;/q;+1/p-1
InchiKey:	AHLATJUETSFVIM-UHFFFAOYSA-M
Formula:	RbF
SMILES:	[F-].[Rb+]
Mol. weight [g/mol]:	104.47
CAS:	13446-74-7

Physical Properties

Property code	Value	Unit	Source
tf	1063.15	K	The phase diagram of the RbF-RbI system

Correlations

Information	Value
Property code	pvap
Equation	$\ln(P_{vp}) = A + B/(T + C)$
Coeff. A	1.22997e+01
Coeff. B	-7.90705e+03
Coeff. C	-6.53770e+02
Temperature range (K), min.	1194.15
Temperature range (K), max.	1683.15

Sources

The Yaws Handbook of Vapor Pressure: Cheméo Relay (1.0): <https://www.sciencedirect.com/book/9780128029992/the-yaws-handbook-of-vapor-pressure>

Thermodynamic studies on CsF/RbF in N,N-dimethylformamide/N,N-dimethylacetamide-RbF mixtures at 298 and 308 K: <https://www.doi.org/10.1016/j.jct.2014.05.003>

Activity Coefficients of RbF in Urea and Formamide Water Mixtures from Potentiometric Measurements: <https://www.doi.org/10.1021/acs.jced.5b00484>

Activity Coefficients of RbF or CsF in the Ethene Glycol + Water System by Cheméo Ref. (10 June)
Phase Diagram Measurements at 298.15 K:
Thermodynamic studies of (RbF + RbCl + H₂O) and (CsF + CsCl + H₂O) ternary systems from potentiometric measurements at T = 298.2 K:
NIST Webbook:

<https://www.doi.org/10.1021/je200178b>

<https://www.doi.org/10.1016/j.jct.2016.08.014>

<https://www.doi.org/10.1016/j.tca.2008.03.014>

<http://webbook.nist.gov/cgi/cbook.cgi?ID=C13446747&Units=SI>

Thermodynamic investigation of RbF + Rb₂SO₄ + H₂O and CsF + Cs₂SO₄ + H₂O ternary systems by potentiometric measurements
Activity Coefficients of RbF in the RbF + RbCl + H₂O and RbF + RbNO₃ + H₂O Ternary Systems
Dependence of the Position of Aqueous Alkali Salt Solutions by Experiment and Molecular Simulation:

<https://www.doi.org/10.1016/j.fluid.2016.11.006>

<https://www.doi.org/10.1021/acs.jced.6b00398>

<https://www.doi.org/10.1021/je500420g>

Legend

pvap: Vapor pressure

tf: Normal melting (fusion) point

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