

Barium fluoride

Other names:	barium difluoride barium difluoride (BaF2) barium fluoride (BaF2)
Inchi:	InChI=1S/Ba.2FH/h;2*1H/q+2;;/p-2
InchiKey:	OYLGJCQECKOTOL-UHFFFAOYSA-L
Formula:	BaF2
SMILES:	F[Ba]F
Mol. weight [g/mol]:	175.32
CAS:	7787-32-8

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
dvisc	0.0035600	Pa×s	1620.20	Viscosity of Molten Alkaline-Earth Fluorides
dvisc	0.0028560	Pa×s	1723.20	Viscosity of Molten Alkaline-Earth Fluorides
dvisc	0.0034600	Pa×s	1642.30	Viscosity of Molten Alkaline-Earth Fluorides
dvisc	0.0031650	Pa×s	1682.70	Viscosity of Molten Alkaline-Earth Fluorides
dvisc	0.0028990	Pa×s	1722.70	Viscosity of Molten Alkaline-Earth Fluorides
dvisc	0.0026650	Pa×s	1763.40	Viscosity of Molten Alkaline-Earth Fluorides
dvisc	0.0024610	Pa×s	1802.50	Viscosity of Molten Alkaline-Earth Fluorides
dvisc	0.0023000	Pa×s	1842.30	Viscosity of Molten Alkaline-Earth Fluorides

dvisc	0.0021720	Pa×s	1880.40	Viscosity of Molten Alkaline-Earth Fluorides	
dvisc	0.0022370	Pa×s	1860.10	Viscosity of Molten Alkaline-Earth Fluorides	
dvisc	0.0023680	Pa×s	1819.50	Viscosity of Molten Alkaline-Earth Fluorides	
dvisc	0.0025700	Pa×s	1779.40	Viscosity of Molten Alkaline-Earth Fluorides	
dvisc	0.0027660	Pa×s	1738.80	Viscosity of Molten Alkaline-Earth Fluorides	
dvisc	0.0029950	Pa×s	1697.50	Viscosity of Molten Alkaline-Earth Fluorides	
dvisc	0.0033090	Pa×s	1657.30	Viscosity of Molten Alkaline-Earth Fluorides	
rho1	4136.20	kg/m3	1614.60	Density Measurement of Molten Alkaline-Earth Fluorides Using Archimedean Dual-Sinker Method	
rho1	4104.10	kg/m3	1653.60	Density Measurement of Molten Alkaline-Earth Fluorides Using Archimedean Dual-Sinker Method	
rho1	4115.20	kg/m3	1635.20	Density Measurement of Molten Alkaline-Earth Fluorides Using Archimedean Dual-Sinker Method	
rho1	4008.60	kg/m3	1754.00	Density Measurement of Molten Alkaline-Earth Fluorides Using Archimedean Dual-Sinker Method	

rho1	4044.10	kg/m3	1716.50	Density Measurement of Molten Alkaline-Earth Fluorides Using Archimedeian Dual-Sinker Method	
rho1	4088.90	kg/m3	1676.60	Density Measurement of Molten Alkaline-Earth Fluorides Using Archimedeian Dual-Sinker Method	
rho1	4127.70	kg/m3	1636.40	Density Measurement of Molten Alkaline-Earth Fluorides Using Archimedeian Dual-Sinker Method	
rho1	4152.60	kg/m3	1614.20	Density Measurement of Molten Alkaline-Earth Fluorides Using Archimedeian Dual-Sinker Method	
rho1	4116.80	kg/m3	1653.10	Density Measurement of Molten Alkaline-Earth Fluorides Using Archimedeian Dual-Sinker Method	
rho1	4084.70	kg/m3	1693.00	Density Measurement of Molten Alkaline-Earth Fluorides Using Archimedeian Dual-Sinker Method	
rho1	4024.10	kg/m3	1732.40	Density Measurement of Molten Alkaline-Earth Fluorides Using Archimedeian Dual-Sinker Method	

rho1	3991.60	kg/m3	1771.70	Density Measurement of Molten Alkaline-Earth Fluorides Using Archimedeian Dual-Sinker Method	
rho1	3957.00	kg/m3	1811.60	Density Measurement of Molten Alkaline-Earth Fluorides Using Archimedeian Dual-Sinker Method	
rho1	3924.70	kg/m3	1851.80	Density Measurement of Molten Alkaline-Earth Fluorides Using Archimedeian Dual-Sinker Method	
rho1	3910.00	kg/m3	1872.50	Density Measurement of Molten Alkaline-Earth Fluorides Using Archimedeian Dual-Sinker Method	
rho1	3942.40	kg/m3	1833.80	Density Measurement of Molten Alkaline-Earth Fluorides Using Archimedeian Dual-Sinker Method	
rho1	3974.10	kg/m3	1795.00	Density Measurement of Molten Alkaline-Earth Fluorides Using Archimedeian Dual-Sinker Method	
rho1	4059.90	kg/m3	1716.40	Density Measurement of Molten Alkaline-Earth Fluorides Using Archimedeian Dual-Sinker Method	

Correlations

Information	Value
Property code	pvap
Equation	$\ln(P_{vp}) = A + B/(T + C)$
Coeff. A	1.68837e+01
Coeff. B	-2.79004e+04
Coeff. C	-2.52770e+02
Temperature range (K), min.	1641.15
Temperature range (K), max.	2523.15

Sources

NIST Webbook:

<http://webbook.nist.gov/cgi/cbook.cgi?ID=C7787328&Units=SI>

The Yaws Handbook of Vapor

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

Pressure:

Viscosity of Molten Alkaline-Earth

<https://www.doi.org/10.1007/s10765-014-1828-5>

Fluorides:

Density Measurement of Molten

<https://www.doi.org/10.1007/s10765-015-1994-0>

Alkaline-Earth Fluorides Using

Thermodynamic Data Bank Method
and BaNdFeO₄(s) in the system Ba Nd
Fe O:

<https://www.doi.org/10.1016/j.tca.2005.12.020>

Legend

dvisc: Dynamic viscosity

pvap: Vapor pressure

rho: Liquid Density

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