

Rubidium Chloride (RbCl)

MATERIALS DATA

Rubidium Chloride is produced by the sealed-ampoule Stockbarger technique.

APPLICATIONS: Rubidium Chloride has only specialist applications.

Transmission Range	0.2 to 25 μ m
Refractive Index	1.46 at 10.6 μ m
Reflection Loss	6.8% at 10.6 μ m (2 surfaces)
Absorption Coefficient	1 x 10 ⁻³ cm ⁻¹ at 10.6 μ m
Reststrahlen Peak	n/a
dn/dT	-39 x 10 ⁻⁶ K ⁻¹
dn/d μ = 0	n/a
Density	2.8 g/cc
Melting Point	715°C
Thermal Conductivity	7.6 W m ⁻¹ K ⁻¹
Thermal Expansion	36 x 10 ⁻⁶ K ⁻¹ at 300K
Hardness	n/a
Specific Heat Capacity	418 J Kg ⁻¹ K ⁻¹ at 283K
Dielectric Constant	55
Youngs Modulus (E)	n/a
Shear Modulus (G)	n/a
Bulk Modulus (K)	16.3 GPa
Elastic Coefficients	C ₁₁ =36.4; C ₁₂ =6.3; C ₄₄ =4.7
Apparent Elastic Limit	n/a
Poisson Ratio	n/a
Solubility	77g/100g water
Molecular Weight	120.92
Class/Structure	Cubic FCC, NaCl, Fm3m, (100) cleavage



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μm	No	μm	No	μm	No
0.248	1.60	0.351	1.53	0.488	1.50
0.590	1.49	0.633	1.49	1.060	1.48
1.550	1.48	2.800	1.48	10.60	1.46

