

## Barium Fluoride (BaF<sub>2</sub>) Deposition Materials

Fairfield Crystal Technology's evaporation chemicals for optical coating are produced to a consistent high quality and purity. Our BaF<sub>2</sub> vacuum-melted deposition material is made from single crystal boules that ensures 99.999% pure crystal material that evaporates cleanly and completely, without out-gassing or spitting and leaves a hard, uniform coating on the substrate. BaF<sub>2</sub> is a coating material that has high mechanical and chemical stability and can be used for infrared applications. Fairfield Crystal works directly with our customers to ensure that the product meets their specification and is delivered in a timely manner.



Substance	Form	Size Range	Evaporation Temperature	Transparency
Barium Fluoride (BaF <sub>2</sub> )	Granules	1 to 4mm	approx. 950°C	200 – 15000 nm

### SPECTROCHEMICAL ANALYSIS (Typ)

Element	Content ppm	Detection Limit (DL) ppm
Aluminum (Al)	< DL	0.27
Boron (B)	< DL	0.36
Chromium (Cr)	< DL	0.26
Copper (Cu)	< DL	0.03
Iron (Fe)	< 1	0.27
Lead (Pb)	< DL	0.37
Magnesium (Mg)	< DL	0.09
Manganese (Mn)	< DL	0.09
Nickel (Ni)	< 1	0.17
Silver (Ag)	< DL	0.07
Strontium (Sr)	< 15	0.32
Tin (Sn)	< 1	0.25
Titanium (Ti)	< DL	0.09
Vanadium (V)	< 2	0.78
Zinc (Zn)	< DL	0.06

## OPTICAL PROPERTIES

Refractive Index	1.47 @ 500nm
	1.46 @ 2800nm
	1.40 @ 10600nm

## PHYSICAL PROPERTIES

Density	4.89 gm/cc
Melting Point	1368°C
Hardness	82.0 Knoop
Crystal Structure	Cubic

Hazard Labeling: Not regulated by Department of Transportation (DOT)

Shipping Classification: UPS or FedEx: Ground, Air

Fairfield Crystal Technology will be pleased to quote you price and delivery.

### Contact us

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