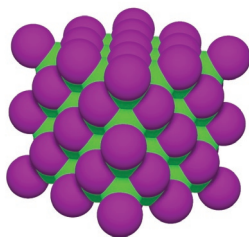


BaF₂
CAS # 7787-32-8

Barium Fluoride

CRYSTAL GROWTH GRADE

Representation of Structure



Barium Fluoride (BaF₂) single crystals are heavy, cross-luminescent scintillators with short emission times and high initial photon intensities. BaF₂ crystals are commonly used in nuclear and elementary-particle physics for detecting alpha particles, gamma radiation and electrons in electromagnetic calorimeters. In addition to attractive scintillation properties, BaF₂ can be employed in the fabrication of optical windows transmitting radiation in the spectrum from IR to UV. BaF₂ can also be used to grow BaY₂F₈ crystals for UV-lasers and is suitable for a number of instrumental environments because of its resistance to water damage.

SAFC Hitech™ BaF₂ is processed to 99.999% trace metals purity. It is available as a crystalline powder or an anhydrous pellet. Material can be packaged in customer furnished containers or to custom quantity in a choice of packaging options.

Ordering Information

Product	Code
Crystalline Powder	HT-BAF100XG-CONF
Anhydrous Beads	HT-BAF300XG-CONF

Physical Properties

Formula Weight:	175.32 g/mol
Boiling Point:	2260°C
Melting Point:	1368°C
Crystal Density:	4.893 g/cc
Heat Capacity:	0.402 J/gK @ (T)
Solubility:	0.17 g/100 mL H ₂ O

Trace Metals Specifications 99.999%

Major Metals Impurities	ICP-MS (ppm)
Al	<2
Ca	<2
Cs	<2
Fe	<2
Ti	<2

Storage

Barium Fluoride should be stored in an air-tight container prior to use to preserve material integrity.