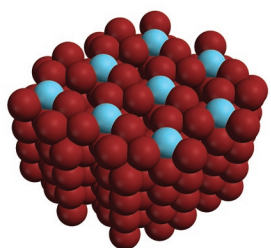


LaBr₃
 CAS # 13536-79-3
 LaCl₃
 CAS # 10099-58-8

Lanthanum Halides

CRYSTAL GROWTH GRADES

Representation of Structure



SAFC Hitech™ offers several rare-earth, alkali earth and alkali halides for the discovery, development and manufacture of high performance scintillator crystals. Lanthanum Bromide shows excellent properties when used to produce gamma ray detector crystals, with excellent linearity in the energy range of 60–1275 keV, as well as high light output and decay times of less than 20 ns.

Lanthanum halides from SAFC Hitech are available as high purity, anhydrous beaded material, allowing for ease of formulation. Material can be packaged in customer furnished containers or to custom quantity in a choice of packaging options.

Ordering Information

Name:	Lanthanum Bromide	Lanthanum Chloride
Physical Form:	Anhydrous Beads	Anhydrous Beads
Code:	HT-LABR210XG-CONF	HT-LACL210XG-CONF

Physical Properties

Formula Weight:	378.62 g/mol	245.26 g/mol
Boiling Point:	1577°C	1000°C
Melting Point:	783°C	860°C
Crystal Density:	5.06 g/cc	3.84 g/cc
Heat Capacity:	0.271 (300) J/gK @ (T)	0.444 (298) J/gK @ (T)

Trace Metals Specifications 99.99%

Major Metals Impurities	ICP-MS (ppm)	ICP-MS (ppm)
Ca	<1	<2
Ce	<13	<30
Cs	<3	—
Fe	<1	<1
Na	<1	<15
Na	<1	—
Pr	—	<1
Sr	<1	—
Y	—	<5
Zn	<1	—

Storage

Lanthanum halides are hygroscopic and should be stored in air-tight containers prior to use to preserve material integrity.