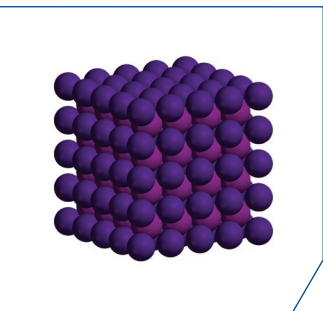


CsI  
CAS # 7789-17-5

# Cesium Iodide

## CRYSTAL GROWTH GRADE

Representation of Structure



Thallium doped cesium iodide (CsI:Tl), has the highest light output of currently employed scintillation materials with a maximum emission at 550 nm. CsI exhibits high resistance to thermal and mechanical shock, and is easily fabricated to fit into most detector geometries. In addition, undoped CsI is used in IR transparent windows for optical applications.

CsI from SAFC Hitech™ is processed to 99.999% trace metals purity and is available as a crystalline powder or anhydrous beads. Material is packaged in 10 KG HDPE bottles or in 30 KG drums. Custom packaging in non-standard sizes or in customer furnished containers can be accommodated.

In addition to supplying high quality raw material, SAFC Hitech can custom blend CsI with an activator halide (e.g., TlI) and will set up a program to reprocess any off-cut doped material to reduce environmental impact and improve cost of ownership.

### Ordering Information

Product	Code
Crystalline Powder	HT-CSI100XG-CONF
Anhydrous Beads	HT-CSI200XG-CONF

### Physical Properties

Formula Weight:	259.8 g/mol
Boiling Point:	~1277°C
Melting Point:	621°C
Crystal Density:	4.51 g/cc
Heat Capacity:	0.201 J/gK @ (T)
Solubility:	44 g/100 mL H <sub>2</sub> O

### Storage

CsI is hygroscopic and should be stored in air-tight containers prior to use to preserve material integrity.

### Trace Metals Specifications 99.999%

Major Metals Impurities	ICP-MS (ppm)
Al	<0.2
Ca	<0.2
Cu	<0.2
K	<0.2
Mg	<0.5
Mo	<0.2
Na	<0.3
Pb	<0.2
Rb	<0.2
Sc	<1.0
Sn	<0.5
Ti	<0.3
Tl	<0.2
Zr	<0.2