

PRODUCT SPECIFICATION

Product name: **Cesium lead iodide – δ/γ -CsPbI₃**

Product number: **CsPBI3 – S**

Form: Powder

Description: High-quality all-inorganic perovskite manufactured with the solvent-free solid-state method. Easily convertible from yellow δ -phase ($E_g = \sim 2.7$ eV) to dark brown mono γ -phase perovskite ($E_g = \sim 1.7$ eV) by moderate-temperature heat treatment ($\sim 325^\circ\text{C}$). Suitable for application in flexible and tandem light-harvesting devices, light-emission diodes, and photodetectors. Synthesized, packed, and stored under inert gas.

Properties	Specification / value
Appearance	Yellow to dark brown
Purity [%]	99.9% (trace metal basis)*
Band-gap [eV]	δ -phase: ~ 2.7 (yellow) γ -phase: ~ 1.7 (dark brown)
Molecular weight [g/mol]	720.82
Solubility	Polar aprotic solvents (e.g., DMF, DMSO, GBL)
Storage conditions	Suitable for RT storage Store under inert gas in dark Hygroscopic
Shelf life	6 months

PACKAGING

Catalogue number	Quantity
CsPBI3 – S – 500	500 mg
CsPBI3 – S – 2	2 g

PRODUCT INTENDED FOR RESEARCH AND DEVELOPMENT PURPOSES ONLY

*The quality and phase-purity of the final product is determined with PXRD and UV-VIS-NIR techniques