

NS6130-12-000575

Cadmium Sulfide Cadmium Selenide

Core Shell

Duick Facts

Product Lead sulfide/Cadmium Selenide core shell

Stock No NS6130-12-000575

99.9% Purity Molecular Formula CdS CdSe Powder Form **APS** 80-100nm

Purity 99.9%

Cadmium selenide is an inorganic compound with the formula CdSe. It is a black to red-black solid that is classified as a II-VI semiconductor of the n-type. Much of the current research on this compound is focused on its nanoparticles. Three crystalline forms of CdSe are known which follow the structures of: wurtzite (hexagonal), sphalerite (cubic) and rock-salt (cubic). The sphalerite CdSe structure is unstable and converts to the wurtzite form upon moderate heating. The transition starts at about 130 °C, and at 700 °C it completes within a day. The rock-salt structure is only observed under high pressure.

Applications:

- CdSe material is transparent to infra-red (IR) light and has seen limited use in photoresistors and in windows for instruments utilizing IR light. The material is also highly luminescent.
- CdSe is a component of the pigment cadmium orange.



















ISO 9001:2015 **CERTIFIED COMPANY**

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