TECHNICAL DATA SHEET

TDS of Cesium carbonate

1. Product Identification

ITEM	CONTENTS
Chinese Name	碳酸铯
English Name	Cesium Carbonate / Caesium Carbonate
English other name	Carbonic acid dicesium; Dicesium carbonate
CAS No.	534-17-8
EINECS No.	208-591-9
MDL	MFCD00010957
Molecular Formula	Cs_2CO_3
Molecular Weight	325.82 g/mol
HS Code	2836.9910

2. Physicochemical properties

ITEM	CONTENTS
Appearance	White crystal form powder or granular
Odor	Odorless
Melting point	610 °C (decomposition)
Density	4.072 g/cm³（20°C）
Vapor pressure	0 Pa（25°C）
Water solubility	261 g/100 mL（20°C），Highly soluble in water
Solubility	Highly soluble in water and alcohols; soluble in ether.
PH value	10–13 (50 g/L aqueous solution, 20°C)
Deliquescence	Highly deliquescent; store in a sealed, dry container.
Stability	Stable; incompatible with strong oxidizing agents and strong acids.

3. Specifications

ITEM	STANDARD
Purity	99%, 99.9%
Appearance	White crystal form powder
Chloride (Cl)	≤0.1%
Sulfate (SO_4)	≤0.05%

4. Main application

Organic synthesis: Used as a strong base in base-sensitive organic reactions (esterification, alkylation, enolization) and in C–C and C–N cross-coupling reactions (Suzuki-Miyaura, Heck, Buchwald-Hartwig amination).
Optoelectronic materials: Perovskite solar cells and OLED electron injection layers, enhancing device efficiency and stability.
Specialty Glass/Ceramics: Production of specialty optical glass and specialty ceramics.
Catalyst: Petroleum catalytic additives
Basic raw material: raw material for producing other cesium salts.

5 Package

ITEM	**STANDARD**
Package	Packaged according to customer requirements: bottles, bags, fiber drums, steel drums, etc.
Storage	Store in a cool, dry, well-ventilated warehouse; keep sealed and protected from moisture; argon blanketing is recommended.
Storage temperature	Room temperature (15–25°C)
Product life	60 months from the date of production (unopened original packaging)

Remarks: Above information is for reference and supplier can change according to updated production situation without prior notice.