

## Technical Data Sheet of Carbon Quantum Dots Yellow, Nitrogen Doped

### Properties

**Form** : Dispersion in water/ethanol

**Quantum Yield** : >%13 (Exc:365nm, in water)

**CAS Number**: 7440-44-0

**Fluorescence** : 492 nm

**Hydrophilic** - HPLC Grade Ethanol, Acetone, Methanol, Dimethylsulfoxide, Dimethyl formamide  
**Surfactant free**

**Concentration** : 2 mg/mL stock solution (to be diluted at least 20x for obtaining maximum PL intensity)

**Sunum e-store product number** : CQD-YND-005

### Product Description

Carbon quantum dots (cqds) are new emergent materials with unique photophysical properties. They have become center attention in nanotechnology with their inexpensive production cost, unusual emission properties and high biocompatibility&non-toxicity. Carbon quantum dots (cqds) are mainly synthesized in aqueous medium, due to their characteristic surface properties, and have emission spectrum in blue - green light region. They have been widely used in many application areas, especially in biotechnology, bioimaging ,biosensors, and biomolecule/drug delivery.

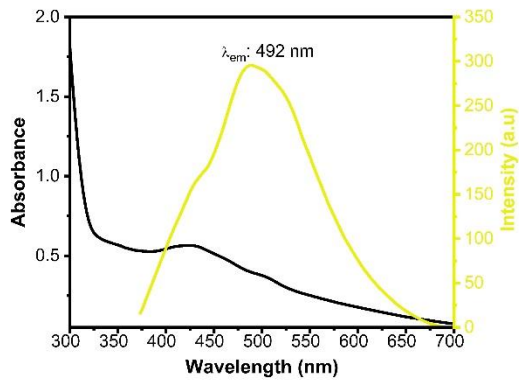
**Application areas**: Biotechnology, bioimaging, biosensors, biomolecule, drug delivery, photocatalysis, energy conversion, sensing, solar cells, supercapacitors, optronics, catalysis, fingerprint recovery.

**Shipping**: Ready to ship in 5 business days

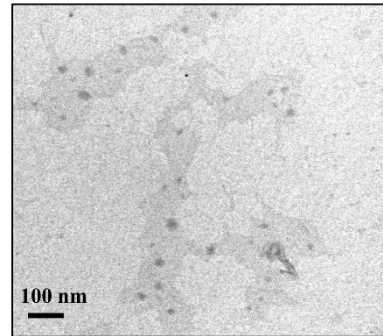
**Storage conditions**: +4 °C

**Packaging** : 10 mL

### Quality Control



UV/Vis spectra of sulfur doped  
Yellow carbon quantum dots



TEM patterns of cqds