Technical Data Sheet of Carbon Quantum Dots
Cyan Blue, Amino Functionalized

Properties

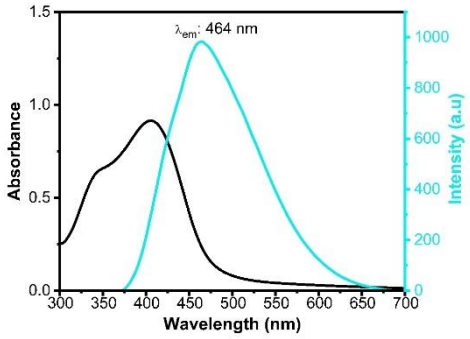
Form : Dispersion in water/ethanol
Quantum Yield : >%53 (Exc:365nm, in water)
CAS Number: 7440-44-0
Fluorescence : 464 nm
Hydrophilic - HPLC Grade Ethanol, Acetone, Methanol, Dimethylsulfoxide, Dimethyl formamide
Amino functionalized surface
Concentration : 2 mg/mL stock solution (to be diluted at least 20x for obtaining maximum PL intensity)
Sunum e-store product number : CQD-CBAAF-003

Product Description

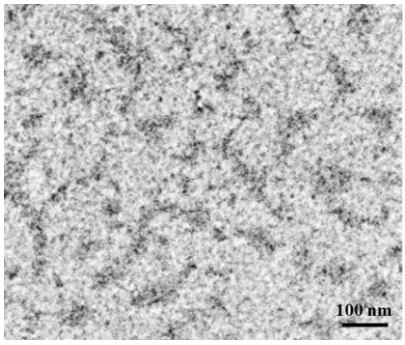
Carbon quantum dots (cqds) are new emergent materials with unique photophysical properties. They have become center attention in nanotechnology with their inexpensive production cost, unusual emission properties and high biocompatibility&non-toxicity. Carbon quantum dots (cqds) are mainly synthesized 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



Plots of integrated fluorescence intensity aganist the absorbance of amino functionalized b-cqd and Rohdamine B (referenced dye) at 365 nm. TEM pattern of amino functionalized b-cqds