

Technical Specifications

High efficiency CdSe/ZnS Quantum Dots in Water- Amine ligands (NH₂)

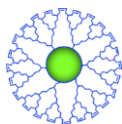
Composition	Cadmium Selenide / Zinc Sulfide quantum dots
Stabilizing ligand*	Amine Ligand (NH ₂)
Concentration	Order amount dependent
Organic Impurities	<1% (not including ligands)
Solvent	Water
Volume	Order amount dependent
Lifetime	Wavelengths 450-540 > two months, wavelengths 560-650 > six months. Dark at 2-8°C
PL FWHM (nm)	20-30
Quantum Yield	>50%

* Other terminated group such as COOH, PEG are available upon request.

Catalogue #	UV peak (nm)	Emission Peak (nm)	FWHM (nm)	Molecular Weight (g/mol)	nmol/mg
HECZWA450	440±10	450±10	20-22	9.50E05	1.05
HECZWA470	460±10	470±10	20-24	1.20E06	0.83
HECZWA500	490±10	500±10	20-28	1.20E06	0.83
HECZWA520	510±10	520±10	21-28	1.35E06	0.74
HECZWA540	530±10	540±10	21-28	1.50E06	0.67
HECZWA560	550±10	560±10	23-28	1.20E06	0.83
HECZWA580	570±10	580±10	23-28	1.35E06	0.74
HECZWA600	590±10	600±10	23-28	1.35E06	0.74
HECZWA620	610±10	620±10	23-28	1.50E06	0.67
HECZWA650	640±10	650±10	25-30	1.65E06	0.61

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Catalogue #	Core diameter (nm)	Shell Thickness (nm) ***	Total Diameter (nm)
HECZWA450	2-2.5	5-6	7-8
HECZWA470	2-2.5	6-7	8-9
HECZWA500	2.5-3	5-6	8-9
HECZWA520	2.5-3	6-7	9-10
HECZWA540	2.5-3	7-8	10-11
HECZWA560	3-3.5	5-6	8-9
HECZWA580	3-3.5	6-7	9-10
HECZWA600	3.5-4	5-6	9-10
HECZWA620	3.5-4	6-7	10-11
HECZWA650	4-4.5	6-7	11-12

***Thickness of shell is expressed as total diameter added to core.