

	<b>CdTe</b> (Cat.Nrs. PL-QDN)	<b>CdSe/ZnS</b> (Cat.Nrs. PL-QD-O)	<b>ZnCdSe/ZnS</b> (Cat.Nrs. PL-QD-O)	<b>ZnCdSeS</b> (Cat.Nrs. PL-QD-OA)	<b>ZnCuInS/ZnS</b> (Cat.Nrs. PL-QD-CF)	<b>Cd-free perovskites</b> (Cat.Nrs. PL-QD-PSK)
Special features	Hydrophilic, can be used for labeling through coupling with -NH <sub>2</sub> group of proteins and other molecules	Highly luminescent. Narrow emission peak.	Highly luminescent. Narrow emission peak. Similar to CdSe/ZnS, but with the Zn-doped core	Low-Cd (typically 100 times lower Cd-content than in CdSe/ZnS). Highly luminescent. Narrow emission peak.	Cd-free. Large Stokes shift, thus low reabsorption. Relatively broad emission (100-120 nm).	Cd-free (Pb-based). Very strong luminescence and narrow peak.
Surface functionality	Carboxylic (-COOH)	Alkyl $-(\text{CH}_2)_n\text{CH}_3$				
Appropriate solvents	Deionized water	Hexane, cyclohexane, toluene, chloroform, THF, pyridine and similar solvents Check solvent compatibility on a small amount of QDs before dissolving larger quantities				
Quantum yield (depends on $\lambda_{em}$ )	15-90 % (NIR QDs have lower QY)	30-80 %	40-80 %	40-90 %	20-60 %	> 90%
Emission peak width (FWHM)	30-100 nm depending on emission wavelength.	< 30 nm	< 30 nm	< 30 nm	ca. 100 nm	15-20 nm
Stokes shift	10-20 nm	10-20 nm	10-20 nm	10-20 nm	ca. 120 nm	10-20 nm
Available emission wavelengths, nm			440 ± 5			450 ± 15
				470 ± 5		
			480 ± 5	480 ± 5		480 ± 15
				490 ± 5		
				500 ± 5		510 ± 15
		510 ± 5		510 ± 5		
		520 ± 5		520 ± 5		
		530 ± 5	530 ± 5	530 ± 5	530 ± 5	530 ± 15
		540 ± 5	540 ± 5	540 ± 5		
		550 ± 5	550 ± 5	550 ± 5		
		560 ± 5	560 ± 5	560 ± 5	560 ± 5	550 ± 15
		570 ± 5	570 ± 5	570 ± 5		
		580 ± 5	580 ± 5	580 ± 5		
		590 ± 5	590 ± 5	590 ± 5	590 ± 5	
		600 ± 5	600 ± 5	600 ± 5		
		610 ± 5	610 ± 5	610 ± 5		
		620 ± 5	620 ± 5		610 ± 15	
		630 ± 5	630 ± 5			
		640 ± 5	640 ± 5			
		650 ± 5	650 ± 5		650 ± 25	
		660 ± 5				
		670 ± 5				
		680 ± 5				
	690 ± 5					
	700 ± 5			700 ± 25		
	710 ± 5					
	720 ± 5					
	730 ± 5					
	740 ± 5					
	750 ± 5					
	760 ± 5					
	770 ± 5					
	780 ± 5					

Quantum dots are also available as kits of different colours.  
All QDs are supplied as a solid material readily dispersible in an appropriate solvent.  
Delivery in solution is available upon request on exceptional basis.