

Nsol™

Nsol™ nanorods are coated in a dense layer of hydrophilic polymers that shield the gold surface and give the particles long-suspension times in organic solvents. As opposed to their uncoated parent form Nanorodz™, Nsol™ nanorods are highly stable and are transferable between a variety of organic solvents.

Composition

The gold nanorods are in a proprietary solvent.

Custom Formulation and Production

Axial sizes 10 nm and 25 nm with wavelength coverage from 550 nm to 850 nm are standard. Near-Infrared wavelengths from 700 to 850 are covered by the 10 nm axial size. The 25 nm axial size covers wavelengths 550 to 750 nm. Other sizes are special order. Please contact us.



Highly concentrated Nsol™ nanorods ready for suspension in solvents.

Quantity

Available in 0.125 ml sizes, highly concentrated, with an OD > 400.

Delivery

All orders come with a batch distribution curve for quality assurance. Standard sizes are in stock. Special order sizes will be shipped in two weeks or less. All shipments are sent Fed Ex Standard Overnight delivery. No shipments on Fridays.

Storage

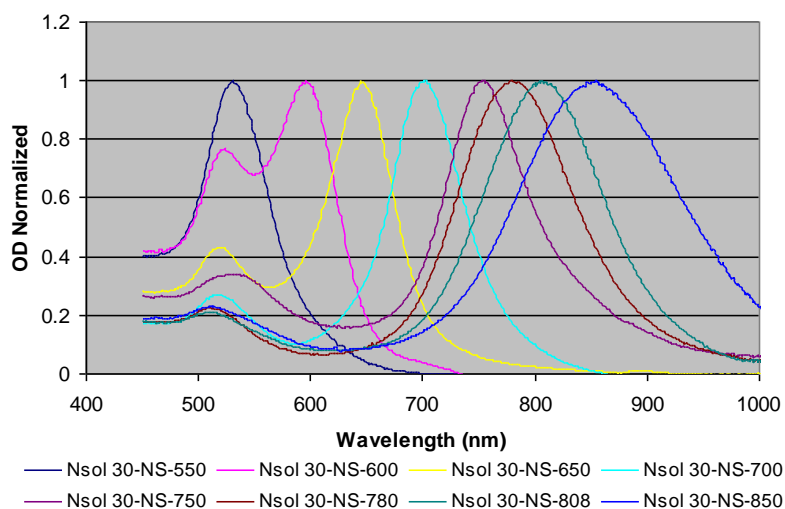
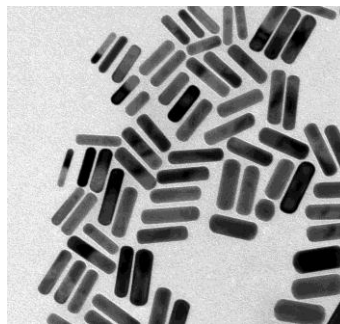
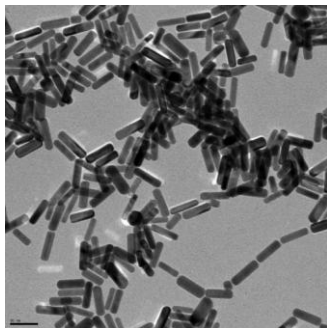
Store at 4°C. Before use, allow nanorods to warm to room temperature.

Use

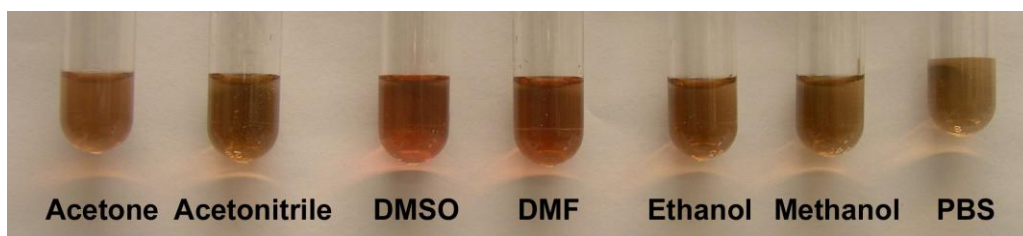
Add dropwise to solvent. Disperse using sonication or vortexing. Nsol™ gold nanorods will stay suspended from hours to days depending on solvent. Suspension may be monitored through UV-VIS spectra and should resemble that shown above.

Conjugation

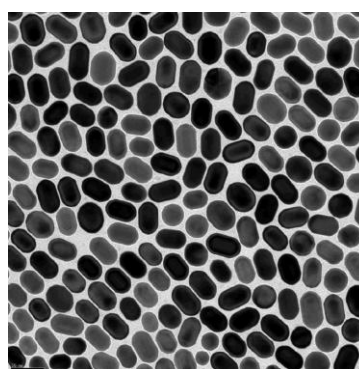
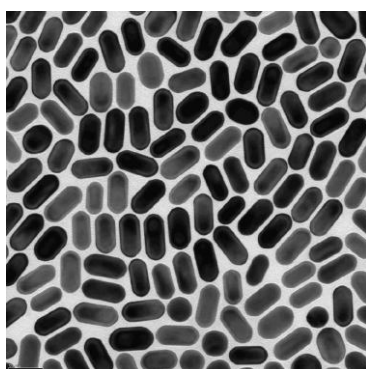
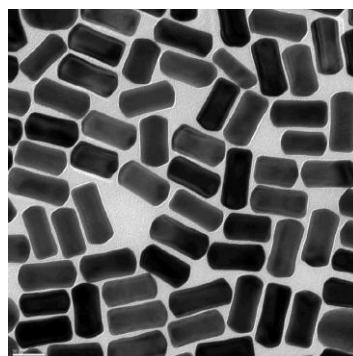
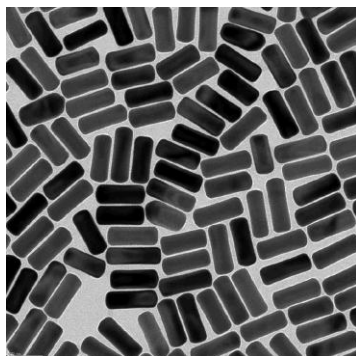
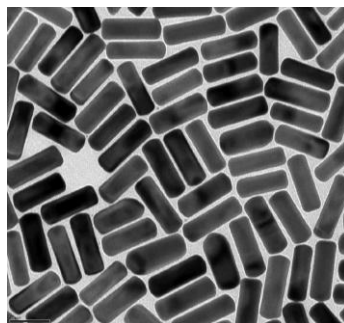
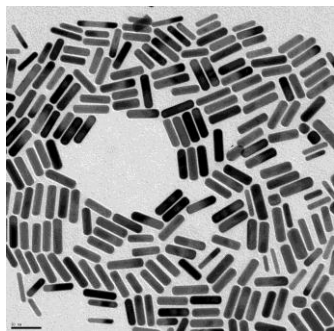
No other conjugation is possible with this coating.



Normalized UV-VIS for Nsol™ Nanorod™



Biological and Chemical Stability of Nsol™ nanorods. Nsol™ nanorods are also readily transferred between a variety of organic solvents.



Representative TEM pictures of Nsol™. (L-R,T-B) 30-NS-850, 30-NS-808, 30-NS-780, 30-NS-750, 30-NS-700, 30-NS-650, 30-NS-600, 30-NS-550.

Product Number

	Nsol Part #
550 nm	30-NS-550
600 nm	30-NS-600
650 nm	30-NS-650
700 nm	30-NS-700
750 nm	30-NS-750
780 nm	30-NS-780
808 nm	30-NS-808
850 nm	30-NS-850

Specifications

Part # Nanorod (Axial Diam/Peak LSPR)	Axial Diameter (nm)	Longitudinal Size (nm)	LSPR Peak Wavelength (nm)	LSPR OD (AU)	TSPR Peak Wavelength (nm)	TSPR OD (AU)	NPS/ml	Wt. conc (µg/ml)	Wt. %	PPM	Molarity (pM)	LSPR Molar Ext. (M-1cm-1)	TSPR Molar Ext. (M-1cm-1)	LSPR Peak accuracy (nm)	LSPR Linewidth 80% (nm)
30-NS-850	10	45	850	375	512	80	2.00E+14	1.34E+04	1.34%	1.34E+04	3.28E+05	1.14E+09	2.44E+08	+/-25	100
30-NS-808	10	41	808	375	512	80	2.20E+14	1.35E+04	1.35%	1.35E+04	3.67E+05	1.02E+09	2.18E+08	+17-9	75
30-NS-780	10	38	780	375	512	80	2.30E+14	1.31E+04	1.31%	1.31E+04	3.82E+05	9.81E+08	2.09E+08	+9-15	65
30-NS-750	25	86	750	375	530	150	2.00E+13	1.61E+04	1.61%	1.61E+04	3.28E+04	1.14E+10	4.58E+09	+/-25	65
30-NS-700	25	73	700	375	530	150	4.90E+13	3.42E+04	3.42%	3.42E+04	8.19E+04	4.58E+09	1.83E+09	+/-25	60
30-NS-650	25	60	650	375	530	150	9.80E+13	5.62E+04	5.62%	5.62E+04	1.64E+05	2.29E+09	9.15E+08	+/-25	60
30-NS-600	25	47	600	375	530	150	2.00E+14	8.82E+04	8.82%	8.82E+04	3.28E+05	1.14E+09	4.58E+08	+/-25	60
30-NS-550	25	34	550	375	530	150	2.00E+14	6.39E+04	6.39%	6.39E+04	3.28E+05	1.14E+09	4.58E+08	+/-25	NA

LSPR = Longitudinal SPR peak
 TSPR = Transverse SPR peak
 Shape monodispersity (% rods) > 95%
 Size variation +/-10% (both dimensions)
 Aspect ratio variation = Peak LSPR accuracy/96
 All specs typical. May vary batch to batch.