STATE OF CALIFORNIA
Department of Toxic Substances Control

Health and Safety Code Section 57019 Chemical Information Call-in Information for Nanometals, Nanometal Oxides, and Quantum Dots
December 2010

This enclosure is provided for your convenience. You may provide the requested information in writing, and attaching any supplementary materials or explanatory information, in letter or report form.

SECTION A: CHEMICAL(S) *(check each one which applies for your company)*

☐ Nano Silver	☐ Nano Titanium Dioxide	☐ Nano Cerium Oxide
☐ Nano Zero Valent Iron	☐ Nano Zinc Oxide	☑ Quantum Dot(s)

SECTION B: BUSINESS IDENTIFICATION INFORMATION *(check one and complete items 1 - 10)*

☐ Sole Owner	☑ Corporation	☐ Limited Liability Company (LLC)	☐ Limited Liability Partnership (LLP)	☐ Unincorporated Business Trust
☐ Spouses' Co-ownership	☐ Registered Domestic Partnership	☐ General Partnership	☐ Limited Partnership	☐ Other: *(describe)*

1. Name of Sole Owner, Corporation, Partnership, Institution, Other.
Nanosys, Inc.

2. Business Trade Name ("Doing Business As," if any)

3. Business Address (physical location of your business: street number and name, city, state, country, zip or postal code)
2625 Hanover Street, Palo Alto, CA 94304

4. Mailing Address (street name and number, P.O. box, city, state, country, zip or postal code, if different from 3)
2625 Hanover Street, Palo Alto, CA 94304

5. Business Website Address(es): **www.nanosysinc.com**

6. Name of Owner, Responsible Corporate Officer, Partner, Other.
Jason Hartlove, President & CEO

7. Contact Information for Person in 6 above.

Name: **Eric Fuller** *Title:* **EHS Program Manager**

Business Telephone: **650-331-2100** *Email:* **efuller@nanosysinc.com**

8. Number of Employees (California employees). **90 employees**

9. NAICS Code(s) for this business: *Primary:* **541710** *Other:* *Other:*

10. Nano Chemical Business Type: (check applicable) ☑ Manufacturer ☐ Importer ☑ Researcher

SECTION C: CERTIFICATION *(FOR THIS COMPLETE SUBMITTAL)*

I am duly authorized to prepare and submit this information, as a formal response to the request pursuant to Health and Safety Code section 57019(d)(1), and certify the information and statements made herein, and in the attachments, are correct to the best of my knowledge and belief.

Name: *(type or print)*	Signature:	Date:
Eric G. Fuller, CSP, CHMM		DECEMBER 02, 2011

SECTION D: NANOMATERIAL CHEMICAL AND PHYSICAL PROPERTIES *(Attach additional pages as needed)*

PRODUCT / PRODUCTION INFORMATION

NANO CHEMICAL NAME: *(Use a separate page for each unique chemical.)*	**Cadmium Selenide with Zinc Sulfide Shell**
COMMERCIAL NAME(S):	
ANNUAL PRODUCTION VOLUME:	**1 Kilogram**
PRODUCTION METHOD(S):	**Liquid Phase Synthesis**
IDENTIFICATION OF THE SUPPLIER(S):	**Nanosys is the sole manufacturer**

PARAMETER		VALUE / RANGE[1] (include units)	NAME OF ANALYTICAL METHOD(S)[2]
PHYSICAL PROPERTIES			
SHAPE (MORPHOLOGY)		**Spherical**	**Transmission election microscope (TEM)**
DENSITY		**4g/cm^3**	**Estimate based on composition**
SURFACE AREA			
PARTICLE SIZE DISTRIBUTION	Air		
	Liquid		
	Solid / Powder	**3—10 nm**	**TEM**
OTHER (Specify)			
CHEMICAL PROPERTIES			
CHEMICAL COMPOSITION		**CdSe/ZnS**	**Elemental Analysis**
SURFACE MODIFICATION (COATING, FUNCTIONALIZATION)		**Aliphatic Ligands (C_8)**	
PURITY		**90%+**	**UV-Vis spectrophotometer**
SURFACE CHARGE		**Negative**	
DISPERSION[3]	Air		
	Liquid	**Liquid**	**Solvent dispersed is common form**
	Solid		
IDENTIFYING AND DETERMINING CONCENTRATION OF NANO CHEMICAL, ITS METABOLITES, AND DEGRADATION PRODUCTS IN SPECIFIED MATRICES[4] Water, Air, Soil, Sediment, Sludge, Chemical Waste, Fish, Blood, Adipose Tissue, Urine, Other (specify)			
SOLUBILITY	Water Solubility	**Low**	
	Solubility in Organic Solvent	**High in non-polar solvent**	
N-OCTANOL-WATER PARTITION COEFFICIENT			
STABILITY AND REACTIVITY	Flammability	**Low**	
	Explosiveness	**Low**	
	Oxidizing Properties	**Low**	
	Oxidation Reduction Potential	**Not known**	
	Storage Stability and Reactivity (Container Material)	**Stable in glass or plastic**	
	Stability to Thermal, Sunlight, and Metal(s)	**Very stable**	

nanosys™

2625 Hanover St
Palo Alto, CA 94304

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DEPARTMENT OF TOXIC SUBSTANCES CONTROL

DEC 09 2011

POLLUTION PREVENTION & GREEN TECHNOLOGY

Department of Toxic Substances Control
Attn: Chemical Information Call-in
Office of Pollution Prevention and Green Techn
P.O. Box 806
Sacramento, CA 95812-0806

95812X0806