



**ND INDUSTRIES , INC.**  
**1893 BARRETT ROAD**  
**TROY, MICHIGAN 48084**  
 (248) 288-0000 Fax: (248) 288-0022  
**24 hr. EMERGENCY CHEMTREC:**  
**1-800-424-9300**

**PRODUCT: ND Microspheres TA Series (300, 800, 850)**  
**MSDS ID: ND3105**  
**ORIG. DATE: 7/22/2002**  
**REV. DATE: 4/7/04**  
**REV. DATE: 12/29/08 PREPARED BY: Chemical Safety**

**SECTION I -Material Identification and Information H: 2 F: 1 R: 0 PPEC**

COMPONENTS	CAS #	PERCENT %	OSHA PEL	ACGIH TLV	OTHER LIMITS RECOMMENDED
Dimethacrylate ester	TA-07-95	24448-20-2 20-30	n.e.	n.e.	n.e.
Organic Peroxide	TA-07-96	94-36-0 10-15	5 mg/m3	5 mg/m3	dust
Metallic Diacrylate*	TA-07-214	Proprietary 1-15			
Calcium or Aluminum Silicate	TA-07-290/223	n/a 10-15	15 mg/m3	10 mg/m3	Respirable dust
N,N'-m-Phenylene Dimaleimide	TA-07-99	3006-93-7 1-10	n.e.	n.e.	n.e.
Synthetic Polymer Resin	TA-07-56	27360-07-2 1-10	15 mg/m3	10 mg/m3	Nuisance dust
Dipentaerythritol Pentaacrylate Esters	TA-07-222/386	60506-81-2 3-5	n.e.	n.e.	n.e.
Pigments	TA-07	mixture <2	n.e.	n.e.	n.e.

Remaining ingredients are either non-hazardous or below reportable levels.

All ingredients are listed on the TSCA Inventory. n.a.= not applicable / n.e.=not established

**SECTION II -Physical and Chemical Characteristics**

<b>BOILING POINT:</b>	0	<b>VOC #/US gal. :</b>	0.0
<b>VAPOR DENSITY:</b>	n.a.	air = 1	<b>DENSITY OF COATING:</b> n.a.
<b>VAPOR PRESSURE:</b>	0		
<b>MELTING POINT:</b>	n.a.		
<b>SPECIFIC GRAVITY:</b>	n.a.	water = 1	
<b>EVAPORATION RATE:</b>	n.a.		
<b>WATER REACTIVE:</b>	no		
<b>SOLUBILITY IN WATER:</b>	not soluble		
<b>APPEARANCE AND ODOR:</b>	Cohesive malleable solid with slight toluene odor. Color varies.		

**SECTION III - Fire and Explosion Hazard Data**

<b>FLASH POINT:</b>	n.e.	Pensky-Martens Closed Cup
<b>AUTOIGNITION TEMPERATURE:</b>	n.e.	
<b>FLAMMABILITY LIMITS % IN AIR:</b>	LEL: n.e.	UEL: n.e.
<b>EXTINGUISHER MEDIA:</b>	Dry chemical, carbon dioxide, or foam is recommended. Carbon dioxide can displace oxygen, use caution when applying carbon dioxide in confined spaces.	
<b>SPECIAL FIREFIGHTING PROCEDURES:</b>	Wear NIOSH approved self-contained breathing apparatus with full face piece operated in pressure-demand or other positive pressure mode when fighting fires. Use water spray to cool fire exposed surfaces and to protect personnel.	
<b>UNUSUAL FIRE HAZARDS AND CONDITIONS TO AVOID:</b>	Cool burning material with water. Residual vapors are heavier than air and may travel along floor to ignition sources where they could ignite, flash back or explode.	

# MATERIAL SAFETY DATA SHEET

**PRODUCT: ND Microspheres TA Series (300, 800, 850)**

## SECTION IV - Reactivity Hazard Data

**STABILITY:**        **stable:** X

**unstable:**

**HAZARDOUS POLYMERIZATION:**

**may occur:**

**will not occur:** X

**CONDITIONS TO AVOID:**    Avoid temperatures exceeding 120°F. Avoid mixing with strong oxidizing agents, strong acids and bases.

**INCOMPATIBILITY:** Excessive heat, ignition sources, oxidizing agents, acids, bases, peroxides, and sodium or calcium hypochlorite.

**HAZARDOUS  
DECOMPOSITION  
PRODUCTS:**

Carbon dioxide, carbon monoxide, nitric oxides

## SECTION V - Health Hazard Data

**PRIMARY ROUTES OF ENTRY:**

**INHALATION:** X

**INGESTION:** X

**SKIN ABSORPTION:** X

**EYE CONTACT:**        May be irritating to the eyes.

**FIRST AID:**            Flush eyes with generous amounts of water for 15 minutes lifting both upper and lower eyelids occasionally. Get medical attention.

**SKIN CONTACT:**        May be severely irritating to the skin.

**FIRST AID:**            Remove contaminated clothing/shoes and wipe excess from skin. Flush skin with large amounts of water; use soap if available. If irritation occurs get medical attention. Do not reuse clothing until cleaned.

**INHALATION:**        Not likely to be route of exposure.

**FIRST AID:**

**INGESTION:**        Small amounts may produce irritation to mouth and throat. Large amounts may be toxic.

**FIRST AID:**            If swallowed, DO NOT INDUCE VOMITING. Give person two glasses of milk or water. Never give anything by mouth to an unconscious person. Get medical attention.

**CHRONIC EFFECTS:**        None Known

**Carcinogenic:**        Not listed.

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Component	Oral LD50	Dermal LD50	Inhalation LC50
Dimethacrylate ester	>5000 mg/kg	not determined	not determined
Organic Peroxide	not determined	not determined	not determined
Metallic Diacrylate*	not determined	not determined	not determined
Calcium or Aluminum Silicate	not determined	not determined	not determined
N,N'-m-Phenylene Dimaleimide	not determined	not determined	not determined
Synthetic Polymer Resin	>10000 mg/kg	>7940 mg/kg	not determined
Dipentaerythritol Pentaacrylate Esters	not determined	not determined	not determined
Pigments	not determined	not determined	not determined

## SECTION VI - Control and Protective Measures

**RESPIRATORY PROTECTION:** Work in a well ventilated area. Wear NIOSH approved respirator if exposures are above the recommended exposure limits.

**PROTECTIVE GLOVES:** Use rubber or latex.

**EYE PROTECTION:** Wear safety glasses with side shields.

**VENTILATION TO BE USED:** LOCAL EXHAUST:  MECHANICAL: SPECIFIC: OTHER (specify): Work in a well ventilated area.

**PROTECTIVE CLOTHING AND EQUIPMENT:** Wear impervious clothing to prevent repeated prolonged skin exposure.

**HYGIENIC WORK PRACTICES:** Practice good personal hygiene and wash hands after using product.

## SECTION VII - Precautions for Safe Handling and Spill/Leak Procedures

### STEPS TO BE TAKEN IF MATERIAL IS SPILLED OR RELEASED:

Sweep up material or coated fasteners and transfer to a container for proper disposal.

**WASTE DISPOSAL METHODS:** Dispose of material according to local, state and federal regulations.

**SAFE HANDLING AND STORAGE:** Store material in a cool dry place.

**OTHER PRECAUTIONS AND SPECIAL HAZARDOUS INFORMATION:**  
None

**RECOMMENDED NFPA/HMIS RATING**

**HEALTH 2**

**FLAMMABILITY 1**

**REACTIVITY 0**

**PERSONAL PROTECTION C**

note: ratings may differ according to application, environment, and physical state.

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NOTES:

## SECTION 313 SUPPLIER NOTIFICATION

Detaching this notification from the Material Safety Data Sheet is prohibited by law and any copying or distribution of same requires this attachment be included.

This product contains the following toxic chemicals subject to the reporting requirements of section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 and 40 CFR 372:

<u>CAS #</u>	<u>CHEMICAL NAME</u>	<u>% BY WEIGHT</u>
	Zinc Compounds	
	Benzoyl Peroxide	

This product contains the following materials that under California Proposition 65 of the Safe Drinking Water and Toxic Enforcement Act of 1986 are recognized to cause cancer or reproductive toxicity.

<u>Material</u>	<u>CAS #</u>	<u>Concentration %</u>	<u>Cancer Agent</u>	<u>Reproductive Toxin</u>	<u>cancer agent &amp; Reproductive Toxin</u>
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