



**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® Acrylic Series  
**MSDS ID:** ND2076  
**ORIG. DATE:** 2/9/98  
**REV. DATE:** 1/30/06  
  
**PREPARED BY:** Chemical Safety

**SECTION I -Material Identification and Information H: 1 F: 1 R: 1 PPE C**

COMPONENTS	CAS #	PERCENT %	OSHA PEL	ACGIH TLV	OTHER LIMITS RECOMMENDED
Aromatic dimethacrylate ester	MC-02-122	24448-20-2 75-85	n.e.	n.e.	
Polyvinyl Alcohol	MC-02-161	25213-24-5 5-10	n.e.	n.e.	
Acrylic copolymer	MC-02-156	proprietary 1-5	n.e.	10mg/M3	
Silica	MC-02-78	112945-52-5 1-5	n.e.	n.e.	Non-hazardous
Triethanolamine	MC-02-157	000102-71-6 <1	n.e.	5mg/M3	
Urea-formaldehyde polymer		25036-13-9 5-8	n.e.	n.e.	
Dibenzoyl peroxide	MC-02-124	94-36-0 1-3	n.e.	n.e.	

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>	n.a.		<b>VOC #/gal. :</b> n.a.
<b>VAPOR DENSITY:</b>	n.a.	air = 1	
<b>VAPOR PRESSURE:</b>	n.a.		<b>DENSITY OF COATING:</b>
<b>MELTING POINT:</b>	n.a.		
<b>SPECIFIC GRAVITY:</b>	> 1.0	water = 1	
<b>EVAPORATION RATE:</b>	n.a.		butyl acetate
<b>WATER REACTIVE:</b>	No.		
<b>SOLUBILITY IN WATER:</b>	Negligible		
<b>APPEARANCE AND ODOR:</b>	Cohesive solid with no odor. Variable colors.		

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

<b>FLASH POINT:</b>	>210°C
<b>AUTOIGNITION TEMPERATURE:</b>	n.a.
<b>FLAMMABILITY LIMITS % IN AIR:</b>	LEL: n.a. UEL: n.a.
<b>EXTINGUISHER MEDIA:</b>	Use extinguishing media proper to primary cause of fire.
<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. Cool fire exposed containers.
<b>UNUSUAL FIRE HAZARDS AND CONDITIONS TO AVOID:</b>	Residue may burn yielding organic vapors. Combustion yields oxides of carbon.

# MATERIAL SAFETY DATA SHEET

**PRODUCT:** ND Microspheres® Acrylic Series

## SECTION IV - Reactivity Hazard Data

**STABILITY:**      **stable:** X                      **unstable:**  
**HAZARDOUS POLYMERIZATION:**      **may occur:**                      **will not occur:** X

**CONDITIONS TO AVOID:**      Fire and excessive heat

**INCOMPATIBILITY:** None

**HAZARDOUS DECOMPOSITION PRODUCTS:**      Combustion yields oxides of carbon and organic vapors.

## SECTION V - Health Hazard Data

**PRIMARY ROUTES OF ENTRY:**      **INHALATION:**                      **INGESTION:**                      **SKIN ABSORPTION:** X

**EYE CONTACT:**      May cause eye irritation.

**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 cause skin irritation

**FIRST AID:**      Remove contaminated clothing and shoes. Thoroughly wash exposed area with soap and water. If irritation occurs, seek medical attention. Launder all clothing before reuse.

**INHALATION:**      Not likely to occur

**FIRST AID:**      If inhaled, remove to fresh air. Give artificial respiration if not breathing. Get medical attention.

**INGESTION:**      Not likely to occur.

**FIRST AID:**      Do NOT induce vomiting. Keep individual calm. Do not give anything by mouth to an unconscious or convulsing person. Get medical attention.

**CHRONIC EFFECTS:**      Sensitive individuals may develop dermatitis from repeated exposures due to components of this product.

**Carcinogenic:**      None of the components as present in the product are listed as carcinogenic

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**PRODUCT: ND Microspheres® Acrylic Series**

Component	Oral LD50	Dermal LD50	Inhalation LC50
Aromatic dimethacrylate ester	not determined	not determine	not determined
Polyvinyl alcohol	23.854 mg/kg Rat	>7490 mg/kg Rabbit	64.000 ppm/4h
Acrylic copolymer	not determined	not determined	not determined
Silica	>5000 mg/ kg	not determined	not determined
Triethanolamine	not determined	not determined	not determined
Urea-formaldehyde polymer	not determined	not determined	not determined
Dibenzoyl peroxide	not determined	not determined	not determined

## SECTION VI - Control and Protective Measures

**RESPIRATORY PROTECTION:** Not required.

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

**EYE PROTECTION:** Wear NIOSH approved safety glasses w/side shields

**VENTILATION TO BE USED:** LOCAL EXHAUST:  MECHANICAL: SPECIFIC: OTHER (specify):

**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 and transfer to container for proper disposal.

**WASTE DISPOSAL METHODS:** Based on our knowledge of the product, its raw materials and processes employed during its manufacture, we believe it is unlikely that this product is a hazardous waste for Federal RCRA purposes. We recommend that you carry out your own tests and evaluations prior to discarding any materials.

**SAFE HANDLING AND STORAGE:** Avoid skin or eye contact contact. Store material at room temperature and keep product container sealed when not in use.

### OTHER PRECAUTIONS AND SPECIAL HAZARDOUS INFORMATION:

D.O.T. Proper Shipping Name:  
Not Regulated

**RECOMMENDED NFPA/HMIS RATING**

**HEALTH 1**

**FLAMMABILITY 1**

**REACTIVITY 1**

**PERSONAL C PROTECTION**

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

# MATERIAL SAFETY DATA SHEET

**PRODUCT: ND Microspheres® Acrylic Series**

**NOTES:**

Proper DOT Shipping Name: Not Regulated

\* The toxicity data for the urea-formaldehyde polymer has not been determined, but supplier of urea-formaldehyde and melamine-formaldehyde resins in a unpolymerized form report their material to be nontoxic to rats orally and rabbits dermally with LD50's of >5000 mg/Kg and >2000 mg/Kg, respectively.

## 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>
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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>
None					

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