

ND INDUSTRIES, INC. **1893 BARRETT ROAD** TROY, MICHIGAN 48084

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PRODUCT: ND Epoxy-Lock®

MSDS ID: ND3559 ORIG. DATE: 9/21/98 **REV. DATE: 3/7/05** 

REV. DATE: 12/30/08 PREPARED BY: Chemical Safety

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

| COMPONENTS                |              | CAS #       | PERCENT<br>% | OSHA<br>PEL | ACGIH<br>TLV | OTHER LIMITS<br>RECOMMENDED |
|---------------------------|--------------|-------------|--------------|-------------|--------------|-----------------------------|
| Amine curing agent adduct | UVH-PCH Base | Mixture     | 25-30        | n.e.        | n.e.         |                             |
| Dimethacrylate ester      | UVH-95       | 24448-20-2  | 15-20        | n.e.        | n.e.         |                             |
| Amine accelerator         | UVH-1        | 103-83-3    | 2-6          | n.e.        | n.e.         |                             |
| Phosphine oxide           | UVH-100      | 75980-60-8  | 1-5          | n.e.        | n.e.         |                             |
| Epoxy resin               | UVR-82       | Proprietary | 30-35        | n.e.        | n.e.         |                             |
| Triacrylates              | UVR-9        | 15625-89-5  | 10-15        | 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**

**BOILING POINT:** n.a.

**VAPOR DENSITY:** n.a.

air = 1

VOC #/US gal. :

**VAPOR PRESSURE:** n.a.

**DENSITY OF COATING:** 

MELTING POINT: n.a.

**SPECIFIC GRAVITY:** 

1.05

water = 1

**EVAPORATION RATE:** n.a. WATER REACTIVE: No

**SOLUBILITY IN WATER:** 

Nil

APPEARANCE AND ODOR:

Two stripes of a solid film with slight amine odor. Color varies.

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

FLASH POINT: n.a.

**AUTOIGNITION TEMPERATURE:** not determined

UEL: FLAMMABILITY LIMITS % IN AIR: LEL: n.a.

**EXTINGUISHER MEDIA:** Use dry chemicals and/or carbon dioxide.

**SPECIAL FIREFIGHTING**  Wear NIOSH self-contained breathing apparatus with full face piece operated in pressure demand or other positive pressure mode when fighting fires.

PROCEDURES:

Potential organic toxic fumes. Combustion yields oxides of carbon and nitrogen.

**UNUSUAL FIRE HAZARDS AND CONDITIONS TO** 

AVOID:

### MATERIAL SAFETY DATA SHEET

PRODUCT: ND Epoxy-Lock®

### **SECTION IV - Reactivity Hazard Data**

STABILITY: stable: X unstable:

HAZARDOUS POLYMERIZATION: may occur: χ will not occur:

**CONDITIONS** Avoid unintentionally breaking skinned layers of material on fastener.

TO AVOID:

**INCOMPATIBILITY:** Avoid strong acids and strong alkalis.

HAZARDOUS DECOMPOSITION PRODUCTS: Combustion yields acrid smoke and oxides of carbon and nitrogen. Nitrogen oxide can react water vapors to

form nitric acid.

### **SECTION V - Health Hazard Data**

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

EYE CONTACT: Not a likely route of exposure. If enters eye, it may cause chemical and mechanical irritation. Serious injury

could result.

FIRST AID: Flush with generous amounts of water for 15 minutes lifting both upper and lower eyelids occasionally. Seek

medical attention immediately.

**SKIN** Not a likely route of exposure. May cause irritation of the skin.

CONTACT:

Immediately remove contaminated clothing and shoes. Wipe excess from skin and flush with plenty of water for

FIRST AID: at least 15 minutes. Thoroughly wash exposed area with soap and water. If irritation occurs, seek medical

attention. Launder clothing before reuse.

**INHALATION:** Heating of material can generate vapors that could cause headaches, nausea, and respiratory irritation.

FIRST AID: Remove individual to fresh air. Give oxygen if breathing is difficult. Administer artificial respiration if not

breathing. Obtain immediate medical attention.

**INGESTION:** Not a likely route of exposure. Slightly toxic if swallowed. Components of this material are highly injurious to all

tissues. Contents of stomach should be removed by gastric suction or vomiting under the guidance of medical

personnel.

**FIRST AID:** If swallowed give 3-4 glasses of water. Never give anything by mouth to an unconscious or convulsing person.

Get medical attention.

CHRONIC EFFECTS:

Dermatitis and indigestion.

Carcinogenic: Not listed.

## MATERIAL SAFETY DATA SHEET

ND Epoxy-Lock® PRODUCT:

Component

Amine curing agent adduct Dimethacrylate ester Amine accelerator Phosphine oxide Epoxy resin Triacrylates

Oral LD50

1653 mg/kg Rat <5000 mg/kg Rat 265 mg/kg Rat not determined > 4q/kq Rabbit 5000 mg/kg Rat

**Dermal LD50** 

1350 mg/kg Rabbit not determined 1660 mg/kg Rabbit not determined 6g/kg Rabbit 5200 mg/kg Rabbit Inhalation LC50

0.5 mg/L Rat not determined 2.06 mg/L Rat not determined not determined not determined

### SECTION VI - Control and Protective Measures

**RESPIRATORY** In the applied form additional respiratory protection is not necessary. It is best to work in a well ventilated area. PROTECTION:

**PROTECTIVE** 

Wear chemical resistant glove such as rubber, nitrile or neoprene.

**GLOVES:** 

**EYE PROTECTION:** Wear NIOSH approved safety glasses. Emergency eye wash stations should be available.

MECHANICAL: LOCAL EXHAUST: X SPECIFIC: **VENTILATION** 

TO BE USED: OTHER (specify):

PROTECTIVE CLOTHING

AND EQUIPMENT:

Wear impervious clothing to prevent repeated or prolonged skin contact.

**HYGIENIC WORK** 

Practice good personal hygiene and wash hands after using product. Adhere to work practices

established by government regulations. PRACTICES:

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

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

Sweep up material and place in proper waste receptacle.

WASTE DISPOSAL

Dispose of material in accordance with local, state and federal regulations.

**METHODS:** 

Store in a cool dry area away from direct sunlight.

SAFE HANDLING AND STORAGE:

OTHER PRECAUTIONS AND SPECIAL HAZARDOUS INFORMATION:

n.a.

RECOMMENDED NFPA/HMIS RATING

HEALTH 1 FLAMMABILITY 1 REACTIVITY 2

PERSONAL

C

**PROTECTION** 

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

# MATERIAL SAFETY DATA SHEET

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|---|---|
| NOTES:  |   |
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| 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:

CAS # CHEMICAL NAME % BY WEIGHT

This product contains no chemical above *de minimis* levels that is subject to Toxic Chemical Release Reporting under Section 313.

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.

| Material              | CAS#     | Concentration % | Cancer<br>Agent | Reproductive<br>Toxin | cancer Reproductive agent & Toxin |
|-----------------------|----------|-----------------|-----------------|-----------------------|-----------------------------------|
| Epichlorohydrin       | 106-89-8 | <1 ppm          | X               |                       |                                   |
| Toluene               | 108-88-3 | (trace)         |                 | X                     |                                   |
| Phenyl glycidyl ether | 122-60-1 | <2 ppm          | X               |                       |                                   |

ND Epoxy-Lock® is a registered trademark of ND Industries®, Inc.

PRODUCT: ND Epoxy-Lock®

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