1. PRODUCT AND COMPANY IDENTIFICATION

**Product Name:** 440 Pneumatic / Hydraulic Thread Sealant

**Synonyms:** 440 Sealant

**Product Number:** 440

**Relevant Identified Uses of the substance and uses advised against**
- **Identified Uses:** Thread, fastener, pipe sealant
- **Uses advised against:** NA

**Supplier:**
ND Industries, Inc.
1893 Barrett Road
Troy, Michigan 48084
Tel: (248) 288-0000
Fax: 248) 288-0022
E-mail: info@ndindustries.com
Website: www.ndindustries.com

**Emergency Telephone Numbers:**
- **Medical Emergency:** United States 1-800-222-1222
- **Transportation Emergency:** United States 1-800-424-9300
  International +1-703-527-3887

2. HAZARDS IDENTIFICATION

**Classification of the substance or mixture**

**GHS Classification in accordance 29 CFR 1910.1200 (OSHA HCS)**
- Acute Toxicity, Oral (Category 4)
- Acute Toxicity, Dermal (Category 4)
- Irritant, Skin (Category 2)
- Irritant, Eye (Category 2B)

**OSHA / GHS Label Elements, including precautionary statements**

**Pictograms:**

| ![Pictogram] | Warning |

**Signal word:** Warning

**Hazard Statement(s)**
- Harmful if swallowed
- Harmful in contact with skin
- Causes skin irritation
- Causes eye irritation

**Precautionary Statement(s)**

**Prevention:**
- Wash face, hands and any exposed skin thoroughly after handling.
- Do not eat, drink or smoke when using this product.
- Wear protective gloves, clothing, eye protection or face protection.

**Response:**
- IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
- Rinse mouth
IF ON SKIN: Wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice attention.

**Storage:**
Store in a well-ventilated place. Keep container tightly closed.

**Disposal:**
Dispose of contents/container in accordance with local/regional/national/international regulations.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS Number</th>
<th>EINECS Number</th>
<th>Weight %</th>
<th>EU Classification*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Polyglycol dimethacrylate</td>
<td>Proprietary</td>
<td>NA</td>
<td>25-35</td>
<td>Not classified</td>
</tr>
<tr>
<td>Polymetric plasticizer</td>
<td>Proprietary</td>
<td>Proprietary</td>
<td>30-40</td>
<td>Not classified</td>
</tr>
<tr>
<td>Hydroxypropyl methacrylate</td>
<td>Mixture</td>
<td>NA</td>
<td>15-25</td>
<td>Not classified</td>
</tr>
<tr>
<td>Cellulose acetate butyrate</td>
<td>9004-36-8</td>
<td>NA</td>
<td>3-8</td>
<td>Not classified</td>
</tr>
<tr>
<td>Hydrophobic Silica</td>
<td>67762-90-7</td>
<td>NA</td>
<td>3-8</td>
<td>Not classified</td>
</tr>
<tr>
<td>Saccharin</td>
<td>81-07-2</td>
<td>201-321-0</td>
<td>1-3</td>
<td>Not classified</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Acute Tox. 3 *</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Acute Tox. 4 *</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>STOT RE 2 *</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Skin Corr. 1B</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Aquatic Chronic 2</td>
</tr>
</tbody>
</table>

*EU Classification is for pure concentrations of the individual materials only, and represents classification under EU regulations. It does not represent the mixture itself.

### 4. FIRST AID MEASURES

**Skin Contact:** Remove contaminated clothing. Flush affected area with soap and plenty of water for at least 15 minutes. If irritation develops or persists, seek medical attention.

**Eye Contact:** Flush eyes with warm water for at least 20 minutes. Hold eyelids apart to ensure complete irrigation of the eyes. Remove contact lenses. Seek medical attention.

**Inhalation:** Move to fresh air. If breathing is difficult provide oxygen. If not breathing, immediately begin rescue breathing. If heart has stopped, provide cardiopulmonary resuscitation (CPR).

**Ingestion:** Do not induce vomiting. If vomiting occurs spontaneously, place head lower than knees, or, if unconscious, in rescue position. Seek immediate medical attention.

**Notes to Physician:** Maintain adequate ventilation and oxygenation of patient.

### 5. FIRE AND IGNITION INFORMATION

**Flash Point:** >200°F (>93°C)

**Explosion Limits in Air – Upper (%):** Not applicable

**Explosion Limits in Air – Lower (%):** Not applicable

**OSHA Flammability Classification:** Combustible

**Auto-ignition Temperature:** Not established for the product itself.

**Extinguishing Media:** Dry chemical, carbon dioxide, foam

**Special Protective Equipment for Firefighters:** Fire fighters should wear full turn-out gear, including a NIOSH approved self-contained breathing apparatus operated in pressure-demand or other positive
6. ACCIDENTAL RELEASE MEASURES

**Personal Precautions:**
Only trained personnel should clean a spill. Evacuate all non-essential personnel. Ventilate spill area. Avoid breathing vapors, eye and skin contact. Wear appropriate personal protective equipment.

**Methods for Cleaning Up:**
Evacuate non-emergency personnel. Isolate the area and prevent access. Ensure adequate ventilation. Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust). Transfer to a waste container. Scrape-up/off dried materials. The waste can then be dispose of in accordance with all applicable local, state, and federal regulations. Ensure adequate ventilation.

See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

**Environmental Precautions:**
Do not allow spilled material onto or into soil, drains, sewer, rivers or other water courses.

7. HANDLING AND STORAGE

**Precautions for Safe Handling:**
Avoid skin and eye contact. Wear appropriate personal protective equipment. Avoid breathing vapors. Work in a well-ventilated area. Do not ingest. Safety showers and eyewash stations should be available for use in the immediate work area. Wash hands after using this product, and before eating, drinking smoking or using the lavatory.

**Conditions for Safe Storage:**
Keep containers tightly closed. Store in well ventilated, cool, dry location, away from direct sunlight and heat sources. Store in approved containers. Do not allow product to freeze.

**Incompatible Materials:**
Oxidizing materials

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

**EXPOSURE LIMITS**
There are no published Occupational Exposure Limits (OELs) for the Product itself or its components.

**ENGINEERING CONTROLS:**
Use only with adequate ventilation. Ventilation must be adequate to maintain the ambient workplace atmosphere below the exposure limit(s) stated above. The use of both general dilution and local exhaust ventilation is recommended to control airborne exposures to mist, vapor, or spray. Do not use in a confined area or areas with little or no air movement.

**PERSONAL PROTECTIVE EQUIPMENT**

**Respiratory Protection:**
When atmospheric levels exceed the exposure guidelines, use a NIOSH approved air-purifying respirator. Use a respirator that has been selected by an industrial hygienist or other technically qualified person for the specific work conditions. If respirators are used, OSHA requires compliance with its respirator program. For situations where atmospheric levels may exceed the level for which an air-purifying respirator is effective, use positive-pressure air-supplying respiratory (air-line or self-contained breathing apparatus).

**Hand Protection:**
Use gloves chemically resistant to this material. Select and use gloves and/or protective clothing to prevent skin contact based on the results of an exposure assessment.

**Eye Protection:**
Wear safety glasses with side shields. Chemical safety goggles and face
shield should be used if splash hazard exists. Eyewash fountain should be located in the immediate work area.

Skin and Body Protection: Wear chemical resistant clothing suitable to the job. Select and use gloves and/or protective clothing to prevent skin contact based on the results of an exposure assessment.

Other: A hazard assessment should be performed before using this material to determine the appropriate personal protective equipment for the task. Safety shower and eyewash stations should be available in the immediate work area. Do not smoke, eat or drink while using this material. Wash hands after using this material, before eating, drinking, smoking or using the lavatory.

9. PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>White Paste</td>
</tr>
<tr>
<td>Odor</td>
<td>Mild</td>
</tr>
<tr>
<td>pH</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Odor Threshold</td>
<td>Not established for the product itself.</td>
</tr>
<tr>
<td>Vapor Pressure</td>
<td>Not established for the product itself.</td>
</tr>
<tr>
<td>Vapor Density</td>
<td>Not established for the product itself.</td>
</tr>
<tr>
<td>Flash Point</td>
<td>&gt;200°F (&gt;93°C)</td>
</tr>
<tr>
<td>Explosion Limits in Air – Upper (%)</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Explosion Limits in Air – Lower (%)</td>
<td>Not applicable</td>
</tr>
<tr>
<td>OSHA Flammability Classification</td>
<td>Combustible</td>
</tr>
<tr>
<td>Auto-ignition Temperature</td>
<td>Not established for the product itself.</td>
</tr>
<tr>
<td>Decomposition Temperature</td>
<td>Not established for the product itself.</td>
</tr>
<tr>
<td>Initial Boiling Point /Range</td>
<td>Not established for the product itself.</td>
</tr>
<tr>
<td>Melting Point</td>
<td>Not established for the product itself.</td>
</tr>
<tr>
<td>Freezing Point</td>
<td>Not established for the product itself.</td>
</tr>
<tr>
<td>Water Solubility</td>
<td>Insoluble</td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>1.15</td>
</tr>
<tr>
<td>Relative Density</td>
<td>Not established for the product itself.</td>
</tr>
<tr>
<td>% Volatile (by Volume)</td>
<td>0.002 lbs. / gal</td>
</tr>
<tr>
<td>Evaporation Rate</td>
<td>Not established for the product itself.</td>
</tr>
<tr>
<td>Partition coefficient: n-octanol/water</td>
<td>Not established for the product itself.</td>
</tr>
<tr>
<td>Viscosity</td>
<td>Not established for the product itself.</td>
</tr>
</tbody>
</table>

10. STABILITY AND REACTIVITY

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stability</td>
<td>Stable under recommended conditions. See section 7.</td>
</tr>
<tr>
<td>Hazardous Polymerization</td>
<td>May occur upon depletion of inhibitor.</td>
</tr>
<tr>
<td>Mechanical Sensitivity (shock)</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Conditions to Avoid</td>
<td>Avoid prolonged storage at temperatures above 100°F, Avoid contact with metal powders, metal salts, and amines.</td>
</tr>
</tbody>
</table>

11. TOXICOLOGICAL INFORMATION

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Routes of Exposure</td>
<td>Skin Contact, Eye Contact</td>
</tr>
<tr>
<td>Signs and Symptoms of Exposure</td>
<td>Contact with the skin can be indicated by redness and/or irritation at the sight of exposure. Contact with the eye(s) is indicated by irritation, redness and watering of the eye(s).</td>
</tr>
</tbody>
</table>

Toxicological data has not been established for the product itself.
Components of this material that have associated toxicological data is provided below.

**Acute Toxicity**

Oral LD50: Cellulose acetate butyrate - >6400 mg/kg (rat)
Hydrophobic Silica - >1000 mg/kg (rat)
Saccharin – 1280 mg/kg (rat)

Inhalation LC50: No data available on the product itself.

Dermal LC50: Cellulose acetate butyrate - >1000 mg/kg (rabbit)
Hydrophobic Silica - >2000 mg/kg (rabbit)

**Serious Eye Damage/Eye Irritation:** No data available on the product itself.

**Skin Corrosion/ Irritation:** No data available on the product itself.

**Respiratory or Skin Sensitization:** No data available on the product itself.

**Germ Cell Mutagenicity:** No data available on the product itself.

**Carcinogenicity**

ACGIH: No component of this product is present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by ACGIH.

IARC: No component of this product is present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

NTP: No component of this product is present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by NTP.

OSHA: No component of this product is present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by OSHA.

**Reproductive Toxicty:** No data available on the product itself.

**Teratogenicity:** No data available on the product itself.

**Specific Target Organ Toxicity – Single Exposure:** No data available on the product itself.

**Specific Target Organ Toxicity – Repeated Exposure:** No data available on the product itself.

**Aspiration Hazard:** No data available on the product itself.

**Synergistic Materials:** No data available on the product itself.

---

**12. ECOLOGICAL INFORMATION**

Information given is based on data on the components and the toxicology of similar products.

**Aquatic Toxicity:**
Do not allow spilled material onto or into soil, drains, sewer, rivers or other water courses.

**Environmental Fate:**

<table>
<thead>
<tr>
<th>Mobility:</th>
<th>No data available on the product itself.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bioaccumulation:</td>
<td>No data available on the product itself.</td>
</tr>
<tr>
<td>Persistence/Degradability:</td>
<td>No data available on the product itself.</td>
</tr>
<tr>
<td>Distribution to Environmental</td>
<td>No data available on the product itself.</td>
</tr>
</tbody>
</table>
Compartments: No data available on the product itself.

13. DISPOSAL CONSIDERATIONS

Disposal:
Disposal of this product must be in accordance with all applicable local, state, and federal regulatory requirements. When disposing of waste materials contact and offer to only licensed professional waste disposal services. Do not dispose of used, unused, or wastes into sanitary sewage or storm water drains or systems.

RCRA Classification (40 CFR 261):
Dispose of in accordance with all applicable local, state and federal regulatory requirements.

Unused and Uncontaminated Product:
Dispose of in accordance with all applicable local, state, and federal regulatory requirements.

Disclaimer:
Information in this section pertains to the product as shipped in its intended composition as described in Section 2 of this MSDS. Contamination or processing may change waste characteristics and requirements. Regulations may also apply to empty containers, liners or rinsate. State/provincial and local regulations may be different from federal regulations.

14. TRANSPORTATION INFORMATION

DOT: Not Regulated
UN Identification Number: NA
Proper Shipping Name: NA
Hazard Class: NA
Packing Group: NA
Marine Pollutant: NA
Poison Inhalation Hazard: NA

IATA: Not Regulated
UN Identification Number: NA
Proper Shipping Name: NA
Hazard Class: NA
Packing Group: NA

IMDG: Not Regulated
UN Identification Number: NA
Proper Shipping Name: NA
Hazard Class: NA
Packing Group: NA
Marine Pollutant: NA

15. REGULATORY INFORMATION

Hazard Classification
OSHA Classification: Hazardous
Acute Toxicity, Oral (Category 4)
Acute Toxicity, Dermal (Category 4)
Irritant, Skin (Category 2)
Irritant, Eye (Category 2B)

International Inventories
All components of this product are listed on or exempt from the following inventories:
Yes - Australian Inventory of Chemical Substances (AICS)
Yes - Domestic Substances List (DSL)
Yes - Chinese Inventory
Yes - European Inventory of Existing Commercial Substances (EINECS)
Yes - Japanese Existing and New Chemical Substances (ENCS)
A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s).
A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

U.S. Federal Regulations

TSCA 12(b) Export Notification: None

Clean Air Act amendments of 1990 (CAA, Section 11240: CFR 82): No

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS #</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
</tbody>
</table>

Clean Water Act (CWA, 40 CFR 116): No Priority Pollutants

Comprehensive Environmental Response, Compensation and Liability Act (CERCLA, 40 CFR 302): Yes

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS #</th>
<th>RQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cumene hydroperoxide</td>
<td>80-15-9</td>
<td>10 lbs.</td>
</tr>
<tr>
<td>Saccharin</td>
<td>81-07-2</td>
<td>100 lbs.</td>
</tr>
</tbody>
</table>

Superfund Amendments and Reauthorization Act, Title III (SARA):

SARA Section 302 (40 CFR 355) Extremely Hazardous Substances: No

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS #</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
</tbody>
</table>

SARA Section 311/312 (40 CFR 370) Hazard Category: Acute

SARA Section 313 (40 CFR 372) Toxics Release Inventory: Yes

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS #</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cumene hydroperoxide</td>
<td>80-15-9</td>
<td>1-3%</td>
</tr>
</tbody>
</table>

U.S. State Regulations

California Proposition 65: This product does not contain chemicals known to the state of California to cause cancer, birth defects or other reproductive harm.

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS #</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cumene hydroperoxide</td>
<td>80-15-9</td>
<td>1-3%</td>
</tr>
</tbody>
</table>

16. OTHER INFORMATION

HMIS Rating

HMIS Index: * - chronic, 0 – Minimal, 1 – slight, 2- moderate, 3 – serious, 4 –severe

- Health: 2
- Flammability: 1
- Physical Hazard: 1

Additional Contacts:

- Prepared by: ND Industries, Inc. – Safety, Health and Environmental Affairs
- Version: 3.2
- Revision Date: 7/8/2014
- Previous Revision Date: None
- Reasons for Revision: Creation of SDS

Glossary

- ACGIH: American Conference of Governmental Industrial Hygienists
- CAS: Chemical Abstract Service Number
- Ceiling: Absolute exposure limit that should not be exceeded at any time
- CERCLA: Comprehensive Environmental Response, Compensation, and Liability Act
- GHS: Globally Harmonized System
- HCS: U.S. Hazard Communications Standard
IARC: International Agency for Research on Cancer
IATA: International Air Transportation Association
IDLH: Immediately Dangerous to Life and Health
IMDG: International Maritime Dangerous Goods Code
DOT: U.S. Department of Transportation
OSHA: Occupational Safety and Health Administration
NTP: U.S. National Toxicology Program
PEL: Permissible Exposure Limit - An airborne concentration in which nearly all workers may be repeatedly exposed … without adverse health effects. Established by US OSHA
ppm: Parts per million
RCRA: Resource Conservation and Recovery Act
SARA: Superfund Amendments and Reauthorization Act
STEL: Short Term Exposure Limit - One time exposure for a duration of 15 minutes, that cannot be repeated more than 4 times per day
TSCA: Toxic Substances Control Act
TLV: Threshold Limit Value - An airborne concentration in which nearly all workers may be repeatedly exposed … without adverse health effects. Established by US ACGIH
TWA: Time Weighted Average - Average exposure on the basis of a 8h/day, 40h/week work schedule

Disclaimer:
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