1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: Vibra-TITE Formula #3
Synonyms: VC-3 Original
Use of the Substance/Preparation: Locking and Sealing Threaded Fasteners
Supplier:
ND Industries, Inc.
1893 Barrett Road
Troy, Michigan 48084
Tel: (248) 288-0000
Fax: 248) 288-0022

Emergency Telephone Number: 24 hr. EMERGENCY CHEMTREC
1-800-424-9300

2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW-

Principle Routes of Exposure: Eye, skin, inhalation

POTENTIAL HEALTH EFFECTS:

Eye Contact: Can cause severe eye irritation. May result in permanent eye damage.
Skin Contact: Prolonged contact may cause moderate skin irritation and dermatitis.
Inhalation: Can cause respiratory tract irritation.
Ingestion: Harmful if ingested.
Carcinogenic Effects: No data on the product itself.
Target Organ Effects: Central Nervous System Depression
Medical Conditions Aggravated: by None Known
Potential Environmental Effects: Not established

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>Methyl Ethyl Ketone</td>
<td>78-93-3</td>
<td>201-159-0</td>
<td>62-72</td>
<td>R11, R36-37-38; R66, R67</td>
</tr>
</tbody>
</table>
**4. FIRST AID MEASURES**

**Eye Contact:**
Flush eyes with generous amounts of water for at least 15 minutes. Occasionally lifting upper and lower eyelids. Seek medical attention.

**Skin Contact:**
Wash exposed area thoroughly with soap and water. Remove contaminated clothing and shoes. Launder before reuse. If symptoms develop seek medical attention.

**Inhalation:**
Remove to fresh air. Seek medical attention.

**Ingestion:**
Drink two glasses of water and seek medical attention. DO NOT INDUCE VOMITING.

**Notes to Physician:**
Treat symptomatically

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**5. FIRE AND IGNITION INFORMATION**

**Flash Point**
24.8°F TCC - 28.4°C TOC

**Explosion Limits in Air – Upper (%):**
11.5 @ 77°F

**Explosion Limits in Air – Lower (%):**
1.8 @ 77°F

**OSHA Flammability Classification:**
This product is considered flammable under OSHA

**Auto-ignition Temperature:**
~860°F

**Extinguishing Media:**
Water spray, CO2, Dry chemical, Foam

**Special Protective Equipment for Firefighters:**
Wear NIOSH approved self contained breathing apparatus and full turnout gear.

**Specific Hazards:**
Vapors are heavier than air.

**Hazardous Decomposition and/or Combustion Products:**
Oxides of carbon.

**Risk of Dust Explosion:**
N/A

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**6. ACCIDENTAL RELEASE MEASURES**

**Personal Precautions:**
Eliminate ignition sources. Only trained personnel should clean up a spill. Use appropriate personal protective equipment.

**Methods for Cleaning Up:**
Use inert absorbent to contain spill. Place collected material into appropriate waste container. Keep container closed.

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**7. HANDLING AND STORAGE**

**Handling:**
Avoid breathing vapors. Keep away from ignition sources.

**Storage:**
Keep container closed when not in use. Store in a cool dry place away from direct sunlight. Containers of this product may be hazardous when emptied, due to product residue. Observe all safety precautions when handling empty containers.

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**8. EXPOSURE CONTROLS / PERSONAL PROTECTION**

**EXPOSURE LIMITS**

Exposure limits for those components with limits are stated below.
Methyl Ethyl Ketone: US OSHA PEL: 200 ppm TWA
US ACGIH – TLV: 200 ppm TWA
Acrylic Polymer US OSHA PEL: none established
US ACGIH – TLV: none established

PEL: Permissible Exposure Limit
STEL: Short Term Exposure Limit
TLV: Threshold Limit Value
TWA: Time Weighted Average
US ACGIH: United States American Conference of Governmental Industrial Hygienists
US OSHA: United States Occupational Safety and Health Administration
WEL: Workplace Exposure Limit

ENGINEERING CONTROLS Use localized ventilation if necessary to maintain concentrations below recommended exposure levels.

PERSONAL PROTECTIVE EQUIPMENT
Respiratory Protection: Work in a well ventilated area. If engineering controls are not sufficient to maintain exposures below recommend levels, use a NIOSH approved respirator to avoid overexposure.
Hand Protection: Use chemical resistant gloves when using this product.
Eye Protection: Use chemical splash goggles when using this product.
Skin and Body Protection: Wear chemical resistant clothing when using this product.
Other: Use good personal hygiene when using this product. Always wash hands before eating, drinking, smoking, or using the toilet.

9. PHYSICAL AND CHEMICAL PROPERTIES
Appearance: Red viscous liquid
Odor: Characteristic
pH (description)
Vapor Pressure: 83 mmHg at 75°F
Boiling Point/Range: ~176°F
Melting Point/Range: Not applicable
Water Solubility: 16.32% at 68°F
Density: 7.67 lb./gal.
Specific Gravity: 0.92
% Volatile (by Volume): Not established
Evaporation Rate: 6.31
Viscosity: 250 cps @ 77°F

10. STABILITY AND REACTIVITY
Stability: Stable
Hazardous Polymerization: Will not occur
Mechanical Sensitivity (shock): None
Conditions to Avoid: Avoid ignition sources such as, heat, open flame, and static discharge. Do not store in direct sunlight.
Hazardous Decomposition and/or Combstion Products: Acrylic monomers
Static Discharge Effects: Avoid static discharge. Use proper bonding and grounding techniques when using this product.

11. TOXICOLOGICAL INFORMATION

ACUTE TOXICITY

Oral LD50: No data on the product itself.
Inhalation LC50: No data on the product itself.
Dermal LC50: No data on the product itself.
Eye Irritation: No data on the product itself.
Skin Irritation: No data on the product itself.

SUBCHRONIC TOXICITY

No data on the product itself.

CHRONIC TOXICITY

Carcinogenic Effects: This product’s components contain trace amounts of xylene, ethylbenzene, and benzene, which are listed as OSHA regulated carcinogens.
Mutagenic Effects: No data on the product itself
Reproductive Toxicity: No data on the product itself.
Sensitizing Effects: Contains no known sensitizers.
Synergistic Materials: Not established

12. ECOLOGICAL INFORMATION

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

Aquatic Toxicity: Not established

ENVIRONMENTAL FATE

Mobility: No data on the product itself.
Bioaccumulation: No data on the product itself.
Persistence / Degradability: No data on the product itself.
Distribution to Environmental Compartments: No data on the product itself.

13. DISPOSAL CONSIDERATIONS

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.

RCRA Classification (40 CFR 261): This product, when determined to be waste, will be hazardous waste by characteristic of ignitability (D001) and/or characteristic of toxicity (D035) according to 40CFR, 261 subpart C.

Unused and Uncontaminated Product: N/A
14. TRANSPORTATION INFORMATION

Proper DOT shipping name: Coating Solution
UN Number: UN1139
Packing group: II
Hazard Class: 3

15. REGULATORY INFORMATION

Hazard Classification
United States – OSHA (29 CFR 1910.1200): This product is considered a hazardous substance under OSHA.
Mexico – NOM-018-STPS: Not determined
Canada – WHMIS Classification (CPR, SOR/88-66): Class B, Division 2

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)
(Yes) - Korean Existing Chemicals List (KECL)
(Yes) - New Zealand Hazardous Substances and New Organisms Act (HSNO)
(Yes) - Philippine Inventory of Chemicals and Chemical Substances (PICCS)
(Yes) - United States Toxic Substances Control Act (TSCA) Inventory

U.S. Federal Regulations
TSCA 12(b) Export Notification: This product does not contain any components that are subject to TSCA 12(b) Export Notification.

Clean Air Act amendments of 1990 (CAA, Section 11240: CFR 82): This product does not contain any components listed as Hazardous Air Pollutants, Toxic substance, or class 1 or class 2 Ozone Depleters.

Clean Water Act (CWA, 40 CFR 116): This product does not contain and listed Priority Pollutants.

Comprehensive Environmental Response, Compensation and Liability Act (CERCLA, 40 CFR 302): This product contains Methyl Ethyl Ketone, RQ=5000lbs.

Superfund Amendments and Reauthorization Act, Title III (SARA):
SARA Section 302 (40 CFR 355) Extremely Hazardous Substances: No components of this product are listed as extremely hazardous chemicals under SARA section 302.

SARA Section 311/312 (40 CFR 370) Hazard Category: This product contains Methyl Ethyl Ketone, a substance identified under section 311/312 as subject to reporting requirements.

SARA Section 313 (40 CFR 372) Toxics Release Inventory: This product contains Methyl Ethyl Ketone, a substance identified under section 313 as subject to the supplier notification requirements.

Pharmaceutical Information: Not permitted

U.S. State Regulations
California Proposition 65: This product contains or may contain, chemicals listed under California Proposition 65 as having developmental or cancer causing effects.

16. OTHER INFORMATION

HMIS Rating
HMIS Index: * - chronic, 0 – Minimal, 1 – slight, 2- moderate, 3 – serious, 4 –severe
Health: 2
Flammability: 3
Physical Hazard: 0

<table>
<thead>
<tr>
<th>Hazard symbols:</th>
<th>F-Highly flammable</th>
<th>Xi-Irritant</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Risk phrases:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>R11</td>
<td>Highly Flammable</td>
</tr>
<tr>
<td>R36/37/38</td>
<td>Irritating to eyes, respiratory system and skin</td>
</tr>
<tr>
<td>R66</td>
<td>Repeated exposure may cause skin dryness or cracking</td>
</tr>
<tr>
<td>R67</td>
<td>Vapors may cause drowsiness and dizziness</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Safety phrases:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>S2</td>
<td>Keep out of reach of children</td>
</tr>
<tr>
<td>S9</td>
<td>Keep container in a well-ventilated place</td>
</tr>
<tr>
<td>S16</td>
<td>Keep away from sources of ignition-No Smoking</td>
</tr>
<tr>
<td>S24/25</td>
<td>Avoid contact with skin and eyes</td>
</tr>
<tr>
<td>S26</td>
<td>In case of contact with eyes, rinse immediately with plenty of water and seek medical advice</td>
</tr>
<tr>
<td>S37/39</td>
<td>Wear suitable gloves and eye/face protection</td>
</tr>
</tbody>
</table>

Additional Contacts:
Prepared by: ND Industries, Inc. – Safety, Health and Environmental Department
Revision Date: 3/30/2010
Previous Revision Date: 12/3/2009
Reasons for Revision: Update section #16 other information.

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