



MATERIAL SAFETY DATA SHEET

Prepared in accordance with ISO 11014-1/ ANSI standard
Z400.1-2004

Revision Date: 10/12/2012
MSDS No.: ND1030

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: Vibra-TITE® VC-3® Threadmate

Synonyms: VC-3 Original Formula #3

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-
Danger:**

Red viscous liquid with characteristic solvent odor.
Flammable liquid and vapor. Eye and skin irritant. Avoid contact with eyes and skin. Respiratory tract irritant. Do not breathe vapors.

Principle Routes of Exposure:

Eye, skin, inhalation

POTENTIAL HEALTH EFFECTS:

Eye Contact:

Vapors cause eye irritation. Splashes can produce painful irritation and eye damage.

Skin Contact:

Prolonged contact may cause moderate skin irritation and dermatitis. May be absorbed through the skin with possible systemic effects.

Inhalation:

Causes respiratory tract irritation.

Ingestion:

Harmful if ingested.

Carcinogenic Effects:

No data available.

Target Organ Effects:

Chronic exposure may cause central nervous system effects.

**Medical Conditions Aggravated by
Exposure:**

Pre-existing skin conditions, eye problems, or persons with impaired respiratory function may be more susceptible to the effects of methyl ethyl ketone.

Potential Environmental Effects:

No data available.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS Number	EINECS Number	Weight %	EU Classification
Methyl Ethyl Ketone	78-93-3	201-159-0	62-72	R11, R36/37/38; R66, R67
Acrylic Polymer	Mixture	Mixture	20-25	Not classified
Acrylic Polymer	Mixture	Mixture	12-18	Not classified

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 clothing 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.

5. FIRE AND IGNITION INFORMATION

Flash Point 24.8°F TCC -4°C TOC

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

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

OSHA Flammability Classification: Flammable.

Auto-ignition Temperature: ~860°F

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

Special Protective Equipment for Firefighters: Fire fighters should wear full protective gear including self contained breathing apparatus.

Specific Hazards: Vapors are heavier than air and may travel distances to ignition sources.

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

Risk of Dust Explosion: Not applicable.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions: Eliminate ignition sources. Only trained personnel should clean up a spill. Ventilate spill area. 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.

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 that held this product may be hazardous when emptied, due to product residue. Observe all safety precautions when handling empty containers.

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.
WEL – OES: 200 ppm (long term), 300 ppm (short term).
Gmgv: 70 µmol MEK/L in urine.

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

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: Wear chemical resistant gloves when using this product.

Eye Protection: Wear chemical splash goggles when using this product.

Skin and Body Protection: Wear chemical resistant clothing when working with this product.

Other: Use good personal hygiene when using this product. Always wash hands before eating, drinking, smoking, or using the lavatory.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Red viscous liquid.
Odor: Characteristic.
pH Not established.
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): 62%.
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 Combustion 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 available.	Carcinogenic Effects:	No data available.
Inhalation LC50:	No data available.	Mutagenic Effects:	No data available.
Dermal LC50:	No data available.	Reproductive Toxicity:	No data available.
Eye Irritation:	No data available.	Sensitizing Effects:	No data available.
Skin Irritation:	No data available.	Synergistic Materials:	No data available.

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

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 Depletors.

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, chemical(s) known to the State of California cause cancer, birth defects or other reproductive harm.

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

Classification	F-Highly flammable	Xi-Irritant	
Hazard symbols:			

Risk phrases:	
R11	Highly Flammable

Product Name: Vibra-TITE® VC-3® Threadmate Product Code: 213 Revision Date: 10/12/2012

R36/37/38	Irritating to eyes, respiratory system and skin
R66	Repeated exposure may cause skin dryness or cracking
R67	Vapors may cause drowsiness and dizziness

Safety phrases:	
S2	Keep out of reach of children
S9	Keep container in a well-ventilated place
S16	Keep away from sources of ignition-No Smoking
S23	Avoid breathing vapors
S24/25	Avoid contact with skin and eyes
S26	In case of contact with eyes, rinse immediately with plenty of water and seek medical advice
S37/39	Wear suitable gloves and eye/face protection

Additional Contacts:

Prepared by: ND Industries, Inc. – Safety, Health and Environmental Department
Revision Date: 10/12/2012
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Reasons for Revision: Section #1.

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