



SAFETY DATA SHEET

Prepared in accordance with OSHA HCS 2012

Revision Date: 8/28/2013

SDS No.: ND1030

Version: 3.1

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: Vibra-TITE® VC-3 Threadmate

Synonyms: VC-3, Original Formula #3

Use of the Substance/Preparation: Threaded Fastener Locking and Sealing

Supplier:

ND Industries, Inc.
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Troy, Michigan 48084
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E-mail: info@ndindustries.com
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2. HAZARDS IDENTIFICATION

Classification of Chemical in Accordance 29 CFR 1910.1200

Classification of Mixture

OSHA HCS 2012:

Flammable, Liquid (Category 2)
Irritation, Skin (Category 2)
Irritation, Eye (Category 2A)
STOT – Single Exposure, CNS (Category 3)

GHS Classification:

Flammable, Liquid (Category 2)
Irritation, Skin (Category 2)
Irritation, Eye (Category 2A)
STOT – Single Exposure, CNS (Category 3)
Acute Toxicity, Oral (Category 5)

OSHA HCS 2012 / GHS Label Elements, including precautionary statements

Pictogram:



Signal word:

DANGER

Hazard Statement(s)

H225 Highly flammable liquid and vapor
H315 Causes skin irritation

- H319 Causes serious eye irritation
- H336 May cause drowsiness or dizziness
- H303 May be harmful if swallowed

Precautionary Statement(s)

- P210 Keep away from heat, sparks, open flames, hot surfaces. - No smoking.
- P233 Keep container tightly closed.
- P240 Keep only in original container.
- P241 Use explosion-proof electrical, ventilating, lighting equipment.
- P242 Use only non-sparking tools.
- P243 Take precautionary measures against static discharge.
- P261 Avoid breathing vapors.
- P264 Wash face, hands and any exposed skin thoroughly after handling.
- P271 Use only outdoors or in a well-ventilated area.
- P280 Wear protective gloves, protective clothing, eye protection, face protection.

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	Flam. Liq. 2 Eye Irrit. 2 STOT SE 3
Acrylic Polymer	Mixture	Mixture	20-25	Not classified
Acrylic Polymer	Mixture	Mixture	12-18	Not classified

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 immediate 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). Seek immediate medical attention.
- 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** 24.8°F TCC (-4°C)
- 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:** Dry chemical, carbon dioxide, foam, Water spray.
- Special Protective**

Equipment for Firefighters:	Fire fighters should wear full turn-out gear, including self-contained breathing apparatus operated in positive pressure mode.
Specific Hazards:	Vapors are heavier than air and may travel distances to ignition sources.
Hazardous Decomposition and/or Combustion Products:	Oxides of carbon, smoke, fumes, unburned hydrocarbons, aldehydes, and cyanides.
Risk of Dust Explosion:	Not applicable.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions:	Eliminate all ignition sources. Only trained personnel should clean a spill. 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. The waste can then be disposed of in accordance with all applicable local, state, and federal regulations. Ensure adequate ventilation.
Environmental Precautions:	See Section 7 for information on safe handling. See Section 8 for information on personal protection equipment. See Section 13 for disposal information. Do not allow spilled material onto or into soil, drains, sewer, rivers or other water courses.

7. HANDLING AND STORAGE

Precautions for Safe Handling:	Keep away from ignition sources. 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:	Store in well ventilated, cool, dry location, away from direct sunlight. Keep containers tightly closed when not in use. Store away from ignition sources.
Incompatible Materials:	Not established for the product itself.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

EXPOSURE LIMITS

Exposure Limits for the Product itself have not been established.

Exposure limits for those components with limits are stated below.

Methyl Ethyl Ketone, CAS RN: 78-93-3	OSHA – PEL: 200 ppm TWA ACGIH – TLV: 200 ppm TWA ACGIH – Ceiling: 300 ppm Gmgv: 70 µmol MEK/L in urine.
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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 may exceed the exposure guideline, 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

- Appearance:** Red, Viscous liquid
- Odor:** Characteristic
- pH** Not established for the product itself.
- Odor Threshold:** Not established for the product itself.
- Vapor Pressure:** 83 mmHg at 75°F
- Flash Point** 24.8°F TCC (-4°C)
- Boiling Point:** ~176°F
- Melting Point:** Not established for the product itself.
- 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
- Water Solubility:** 16.32% at 68°F
- Specific Gravity:** 0.92
- Relative Density:** 7.67 lb./gal.
- % Volatile (by Volume):** 62%
- Evaporation Rate:** 6.31
- Partition coefficient: n-octanol/water** Not established for the product itself.

Viscosity: 250 cps @ 77°F

10. STABILITY AND REACTIVITY

Stability: Stable under recommended conditions. See section 7.
Hazardous Polymerization: Will not occur.
Mechanical Sensitivity (shock): Not applicable.
Conditions to Avoid: Avoid heat, sparks, open flames, or other ignition sources. Do not store in direct sunlight.
Hazardous Decomposition and/or Combustion Products: Acrylic monomers. Oxides of carbon, smoke, fumes, unburned hydrocarbons, aldehydes, and cyanides.
Static Discharge Effects: Avoid static discharge. Use proper bonding and grounding techniques when using this product.

11. TOXICOLOGICAL INFORMATION

Routes of Exposure: Inhalation, Ingestion, Skin Contact, Eye Contact

Signs and Symptoms of Exposure: 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). Inhalation is indicated by dizziness or light-headedness.

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: Methyl Ethyl Ketone: 2737 mg/kg (rat), 4050 mg/kg (mouse)
 Inhalation LC50: Methyl Ethyl Ketone: 23500 mg/m³ 8 hours (rat)
 Dermal LC50: Methyl Ethyl Ketone: 6480 mg/kg (rabbit)

Serious Eye Damage/Eye Irritation: Eye irritation

Skin Corrosion/Irritation: Skin irritation

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 Toxicity: 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: No data available on the product itself. Do not allow spilled material onto or into soil, drains, sewer, rivers or other water courses.

Environmental Fate:

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

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:

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:

UN Identification Number: UN1139
 Proper Shipping Name: Coating Solution
 Hazard Class: 3
 Packing Group: II
 Marine Pollutant: NA
 Poison Inhalation Hazard: NA

IATA:

UN Identification Number: UN1139
 Proper Shipping Name: Coating Solution
 Hazard Class: 3
 Packing Group: II

IMDG:

UN Identification Number: UN1139
 Proper Shipping Name: Coating Solution
 Hazard Class: 3
 Packing Group: II
 Marine Pollutant: NA

15. REGULATORY INFORMATION

Hazard Classification

OSHA HCS 2012: Hazardous

- Flammable, Liquid (Category 2)
- Irritation, Skin (Category 2)
- Irritation, Eye (Category 2A)
- STOT – Single Exposure, CNS (Category 3)

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: None

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

Component	CAS #	Amount
NA	NA	NA

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

Comprehensive Environmental Response, Compensation and Liability Act (CERCLA, 40 CFR 302): No

Component	CAS #	RQ
Methyl Ethyl Ketone	78-93-3	5000 lbs.

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

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

Component	CAS #	Amount
NA	NA	NA

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

SARA Section 313 (40 CFR 372) Toxics Release Inventory: No

Component	CAS #	Amount
NA	NA	NA

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.

Component	CAS #	Amount
NA	NA	NA

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

Additional Contacts:

Prepared by: ND Industries, Inc. – Safety, Health and Environmental Affairs
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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. Establish 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

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