

Safety Data Sheet
according to HPR, Schedule 1

Printing date 01/29/2024

Reviewed on 01/29/2024

1 Identification

- Product identifier

- **Trade name:** Vibra-TITE® Threadlocker
- **Synonyms:** 137 High Temp / High Strength Threadlocker
- **Part number:** VT137
- **Application of the substance / the mixture** Thread Locking

- Details of the supplier of the safety data sheet

- Manufacturer/Supplier:

ND Industries, Inc
1000 North Crooks Road
Clawson, MI 48017
USA
Telephone: +1-248-288-0000
Email: info@ndindustries.com
Website: www.ndindustries.com
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1000 North Crooks Road
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USA
Telephone: +1-248-288-0000
Email: info@ndindustries.com
Website: www.ndindustries.com

- **Information department:** Product Safety Department

- Emergency telephone number:

United States: 1-800-424-9300
International: +1-703-527-3887

2 Hazard identification

- Classification of the substance or mixture



GHS08 Health hazard

Carcinogenicity – Category 2

H351 Suspected of causing cancer.

Specific Target Organ Toxicity - Repeated Exposure - Category 2 H373 May cause damage to organs through prolonged or repeated exposure.



GHS07

Skin Irritation - Category 2

H315 Causes skin irritation.

Eye Irritation - Category 2A

H319 Causes serious eye irritation.

Skin Sensitizer - Category 1

H317 May cause an allergic skin reaction.

- Label elements

- **GHS label elements** The product is classified and labeled according to the Globally Harmonized System (GHS).

- Hazard pictograms



GHS07 GHS08

- **Signal word** Warning

- Hazard-determining components of labeling:

(1-methylethylidene)bis(4,1-phenyleneoxy-2,1-ethanediyl) bismethacrylate
dimethylbenzyl hydroperoxide
Cumene
1,1'-(1,3-phenylene)bis-1H-pyrrole-2,5-dione
methacrylic acid, monoester with propane-1,2-diol
2-Butenedioic acid (2Z)
2'-phenylacetohydrazide

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- Hazard statements

- H315 Causes skin irritation.
 H319 Causes serious eye irritation.
 H317 May cause an allergic skin reaction.
 H351 Suspected of causing cancer.
 H373 May cause damage to organs through prolonged or repeated exposure.

- Precautionary statements

- P201 Obtain special instructions before use.
 P202 Do not handle until all safety precautions have been read and understood.
 P260 Do not breathe dust/fume/gas/mist/vapours/spray.
 P264 Wash thoroughly after handling.
 P272 Contaminated work clothing should not be allowed out of the workplace.
 P280 Wear protective gloves/protective clothing/eye protection/face protection.
 P280 Wear protective gloves.
 P302+P352 If on skin: Wash with plenty of water.
 P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 P308+P313 IF exposed or concerned: Get medical advice/attention.
 P314 Get medical advice/attention if you feel unwell.
 P362+P364 Take off contaminated clothing and wash it before reuse.
 P332+P313 If skin irritation occurs: Get medical advice/attention.
 P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
 P321 Specific treatment (see on this label).
 P337+P313 If eye irritation persists: Get medical advice/attention.
 P405 Store locked up.
 P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

*** 3 Composition/Information on ingredients****- Chemical characterization: Mixtures**

- **Description:** Mixture of the substances listed below with nonhazardous additions.

- Dangerous components:

CAS: 24448-20-2	(1-methylethylidene)bis(4,1-phenyleneoxy-2,1-ethanediy) bismethacrylate Skin Irritation - Category 2, H315; Eye Irritation - Category 2A, H319; Skin Sensitizer - Category 1B, H317	60 – 80% w/w
CAS: 3006-93-7	1,1'-(1,3-phenylene)bis-1H-pyrrole-2,5-dione Acute Toxicity (Inhalation) - Category 1, H330; Acute Toxicity (Oral) - Category 4, H302; Skin Sensitizer - Category 1A, H317	7 – 13% w/w
CAS: 27813-02-1	methacrylic acid, monoester with propane-1,2-diol Eye Irritation - Category 2A, H319; Skin Sensitizer - Category 1, H317	5 – 10% w/w
CAS: 80-15-9	dimethylbenzyl hydroperoxide Self-reactive Substances and Mixtures – Type F, H242; Organic Peroxides – Type E, H242; Acute Toxicity (Inhalation) - Category 3, H331; Specific Target Organ Toxicity - Repeated Exposure - Category 2, H373; Aspiration Hazard - Category 1, H304; Skin Corrosion - Category 1B, H314; Serious Eye Damage - Category 1, H318; Acute Toxicity (Oral) - Category 4, H302; Acute Toxicity (Dermal) – Category 4, H312; Specific Target Organ Toxicity - Single Exposure - Category 3, H335; Flammable Liquids - Category 4, H227	0.5 – 1.5% w/w
CAS: 110-16-7	2-Butenedioic acid (Z)	0.1 – 1% w/w
CAS: 98-82-8	Cumene Flammable Liquids - Category 3, H226; Carcinogenicity – Category 2, H351; Aspiration Hazard - Category 1, H304; Acute Toxicity (Oral) - Category 4, H302; Specific Target Organ Toxicity - Single Exposure - Category 3, H335	0.1 – 1% w/w
CAS: 114-83-0	2'-phenylacetohydrazide Acute Toxicity (Oral) - Category 4, H302; Skin Irritation - Category 2, H315; Eye Irritation - Category 2A, H319; Skin Sensitizer - Category 1, H317; Specific Target Organ Toxicity - Single Exposure - Category 3, H335	0.1 – 1% w/w

*** 4 First-aid measures****- Description of first aid measures****- General information:**

Immediately remove any clothing soiled by the product.
 Remove breathing apparatus only after contaminated clothing have been completely removed.
 In case of irregular breathing or respiratory arrest provide artificial respiration.

- After inhalation:

Supply fresh air or oxygen; call for doctor.
 In case of unconsciousness place patient stably in side position for transportation.

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Supply fresh air; consult doctor in case of complaints.

- **After skin contact:** Immediately wash with water and soap and rinse thoroughly.
- **After eye contact:** Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
- **After swallowing:** If symptoms persist consult doctor.
- **Information for doctor:**
 - **Most important symptoms and effects, both acute and delayed** No further relevant information available.
 - **Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

* 5 Fire-fighting measures

- **Extinguishing media**
 - **Suitable extinguishing agents:**
CO₂, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **Special hazards arising from the substance or mixture** No further relevant information available.
- **Advice for firefighters**
 - **Protective equipment:**
Mouth respiratory protective device.
Wear self-contained respiratory protective device.
Wear fully protective suit.

* 6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**
Ensure adequate ventilation
Wear protective clothing.
- **Environmental precautions:** Do not allow to enter sewers/ surface or ground water.
- **Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Dispose contaminated material as waste according to section 13.
Ensure adequate ventilation.
Dispose of the collected material according to regulations.
- **Reference to other sections**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

* 7 Handling and storage

- **Handling:**
 - **Precautions for safe handling**
Ensure good ventilation/exhaustion at the workplace.
Open and handle receptacle with care.
Prevent formation of aerosols.
No special precautions are necessary if used correctly.
 - **Information about protection against explosions and fires:** Keep respiratory protective device available.
- **Conditions for safe storage, including any incompatibilities**
 - **Storage:**
 - **Requirements to be met by storerooms and receptacles:** No special requirements.
 - **Information about storage in one common storage facility:** Not required.
 - **Further information about storage conditions:**
Keep receptacle tightly sealed.
Store in cool, dry conditions in well sealed receptacles.
- **Specific end use(s)** No further relevant information available.

* 8 Exposure controls/ Personal protection

- **Additional information about design of technical systems:** No further data; see section 7.
- **Control parameters**
 - **Components with limit values that require monitoring at the workplace:**
The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit.
At this time, the other constituents have no known exposure limits.

CAS: 80-15-9 dimethylbenzyl hydroperoxide	
WEEL (USA)	TWA: 6 mg/m ³ , 1 ppm Skin
CAS: 98-82-8 Cumene	
EL (Canada)	STEL: 75 ppm TWA: 25 ppm IARC 2B

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EV (Canada)	TWA: 245 mg/m ³ , 50 ppm Skin
PEL (USA)	TWA: 245 mg/m ³ , 50 ppm Skin
REL (USA)	TWA: 245 mg/m ³ , 50 ppm Skin
TLV (USA)	TWA: 5 ppm A3

- **Additional information:** The lists that were valid during the creation were used as basis.

- Exposure controls

- Personal protective equipment:

- General protective and hygienic measures:

Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing.
Wash hands before breaks and at the end of work.
Store protective clothing separately.
Avoid contact with the eyes and skin.

- Breathing equipment:

Not required.
In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

- Protection of hands:



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

- Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

Nitrile rubber, NBR

- Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

- **Eye protection:** Required use of safety glasses

- **Body protection:** Protective work clothing

* 9 Physical and chemical properties

- Information on basic physical and chemical properties

- General Information

- Appearance:

- **Form:** Fluid

- **Color:** Red

- **Odor:** Characteristic

- **Odor threshold:** Not determined.

- **pH-value:** Not determined.

- Change in condition

- **Melting point/Melting range:** Undetermined.

- **Boiling point/Boiling range:** ≥ 170 °C

- **Flash point:** 95 °C

- **Flammability (solid, gaseous):** Not applicable.

- **Decomposition temperature:** Not determined.

- **Ignition temperature:** Product is not selfigniting.

- **Danger of explosion:** Product does not present an explosion hazard.

- Explosion limits:

- **Lower:** Not determined.

- **Upper:** Not determined.

- **Vapor pressure at 20 °C:** ≤ 0.1 hPa

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- Density:	Not determined.
- Relative density	Not determined.
- Vapor density	Not determined.
- Evaporation rate	Not determined.
- Solubility in / Miscibility with	
- Water:	Not miscible or difficult to mix.
- Partition coefficient (n-octanol/water):	Not determined.
- Viscosity:	
- Dynamic:	Not determined.
- Kinematic:	Not determined.
- Solvent content:	
- Organic solvents:	1.0 %
- Water:	0.3 %
- VOC content:	1.04 % 10.4 g/l / 0.09 lb/gal
- Solids content:	15.9 %
- Other information	No further relevant information available.

10 Stability and reactivity

- **Reactivity** No further relevant information available.
- **Chemical stability**
 - **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Possibility of hazardous reactions** No dangerous reactions known.
- **Conditions to avoid** No further relevant information available.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:**
 - Aldehyde
 - Hydrocarbons

*11 Toxicological information

- **Information on toxicological effects**
 - **Acute toxicity:**

- LD/LC50 values that are relevant for classification:

ATE (Acute Toxicity Estimate)

Oral	LD50	3,413 mg/kg
Dermal	LD50	39,683 mg/kg (rat)
Inhalative	LC50/4 h	0.0385 mg/l

CAS: 3006-93-7 1,1'-(1,3-phenylene)bis-1H-pyrrole-2,5-dione

Oral	LD50	500 mg/kg (ATE)
Inhalative	LC50/4 h	0.005 mg/l (ATE)

CAS: 80-15-9 dimethylbenzyl hydroperoxide

Oral	LD50	382 mg/kg (rat)
Dermal	LD50	500 mg/kg (rat)
Inhalative	LC50/4 h	220 mg/l (rat)

CAS: 110-16-7 2-Butenedioic acid (2Z)

Oral	LD50	708 mg/kg (rat)
Dermal	LD50	1,560 mg/kg (rabbit)

CAS: 98-82-8 Cumene

Oral	LD50	1,400 mg/kg (rat)
Dermal	LD50	12,300 mg/kg (rabbit)
Inhalative	LC50/4 h	24.7 mg/l (mouse)

CAS: 114-83-0 2'-phenylacetohydrazide

Oral	LD50	270 mg/kg (mouse)
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- **Primary irritant effect:**

- **on the skin:** Irritant to skin and mucous membranes.
- **on the eye:** Irritating effect.

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- **Sensitization:** Sensitization possible through skin contact.
- **Additional toxicological information:**
The product shows the following dangers according to internally approved calculation methods for preparations:
Irritant
Very toxic

- **Carcinogenic categories**

- **IARC (International Agency for Research on Cancer)**

CAS: 98-82-8	Cumene	2B
CAS: 7631-86-9	Silicon dioxide, Untreated fumed	3

- **NTP (National Toxicology Program)**

CAS: 98-82-8	Cumene	R
CAS: 130-15-4	1,4-naphthoquinone	R

12 Ecological information

- **Toxicity**
 - **Aquatic toxicity:** No further relevant information available.
- **Persistence and degradability** No further relevant information available.
- **Behavior in environmental systems:**
 - **Bioaccumulative potential** No further relevant information available.
 - **Mobility in soil** No further relevant information available.
- **Additional ecological information:**
 - **General notes:**
Water hazard class 1 (Self-assessment): slightly hazardous for water
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
- **Results of PBT and vPvB assessment**
 - **PBT:** Not applicable.
 - **vPvB:** Not applicable.
- **Other adverse effects** No further relevant information available.

13 Disposal considerations

- **Waste treatment methods**
 - **Recommendation:** Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
- **Uncleaned packagings:**
 - **Recommendation:** Disposal must be made according to official regulations.

*14 Transport information

- UN-Number	
- DOT/TDG, ADR, IMDG, IATA	not regulated
- UN proper shipping name	
- DOT/TDG, ADR, IMDG, IATA	not regulated
- Transport hazard class(es)	
- DOT/TDG, ADR, ADN, IMDG, IATA	
- Class	not regulated
- Packing group	
- DOT/TDG, ADR, IMDG, IATA	not regulated
- Environmental hazards:	
- Marine pollutant:	No
- Special precautions for user	Not applicable.
- Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable.
- UN "Model Regulation":	not regulated

*15 Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**
No further relevant information available.

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- Sara

- Section 355 (extremely hazardous substances):

None of the ingredients is listed.

- Section 313 (Specific toxic chemical listings):

CAS: 80-15-9 dimethylbenzyl hydroperoxide

CAS: 98-82-8 Cumene

- TSCA (Toxic Substances Control Act):

All components have the value ACTIVE.

- Canadian substance listings:
- Canadian Domestic Substances List (DSL)

CAS: 24448-20-2 (1-methylethylidene)bis(4,1-phenyleneoxy-2,1-ethanediyl) bismethacrylate

CAS: 3006-93-7 1,1'-(1,3-phenylene)bis-1H-pyrrole-2,5-dione

CAS: 27813-02-1 methacrylic acid, monoester with propane-1,2-diol

CAS: 112945-52-5 Silicon dioxide, amorphous

CAS: 80-15-9 dimethylbenzyl hydroperoxide

CAS: 57-55-6 propane-1,2-diol

CAS: 25852-47-5 2-(2-methylprop-2-enoyloxy)ethyl 2-methylprop-2-enoate

CAS: 7732-18-5 Deionized water

CAS: 110-16-7 2-Butenedioic acid (2Z)

CAS: 128-44-9 Saccharin

CAS: 98-82-8 Cumene

CAS: 114-83-0 2'-phenylacetohydrazide

CAS: 64-02-8 tetrasodium ethylenediaminetetraacetate

CAS: 617-94-7 2-Phenyl-2-propanol

CAS: 7128-64-5 2,5-thiophenediylbis(5-tert-butyl-1,3-benzoxazole)

CAS: 995-33-5 n-butyl-4,4-di(tert-butylperoxy)-valerate (not more than 52%, and inert solid not less than 48%)

CAS: 471-34-1 calcium carbonate

CAS: 5080-22-8 N-isopropylhydroxylamine

Coloring Agent

CAS: 7631-86-9 Silicon dioxide, Untreated fumed

CAS: 67762-90-7 Amorphous Silica

CAS: 130-15-4 1,4-naphthoquinone

CAS: 2809-21-4 1-hydroxyethane-1,1-diylbis(phosphonic acid)

CAS: 13598-36-2 phosphorous acid

- Canadian Non-Domestic Substances List (NDSL)

CAS: 127-06-0 2-Propanone, oxime

- Canadian Ingredient Disclosure list (limit 0.1%)

None of the ingredients is listed.

- Canadian Ingredient Disclosure list (limit 1%)

CAS: 80-15-9 dimethylbenzyl hydroperoxide

- Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

***16 Other information**

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- Department issuing SDS: ND Industries, Inc. - Safety, Health and Environmental Affairs

- Contact: Safety, Health and Environmental Affairs

- Classification System:
- HMIS-ratings (scale 0 - 4)

HEALTH	4	Health = *4
FIRE	1	Fire = 1
REACTIVITY	0	Reactivity = 0

- NFPA ratings (scale 0 - 4)

2	1	0	Health = 2
			Fire = 1
			Reactivity = 0

- Date of the latest revision of the safety data sheet 01/29/2024

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- Abbreviations and acronyms:

IMDG: International Maritime Code for Dangerous Goods
DOT: US Department of Transportation
IATA: International Air Transport Association
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
VOC: Volatile Organic Compounds (USA, EU)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative

- * Data compared to the previous version altered.**- Disclaimer**

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