

Safety Data Sheet
according to HPR, Schedule 1

Printing date 12/04/2024

Reviewed on 12/04/2024

1 Identification**- Product identifier**

- **Trade name:** Vibra-TITE® Threadlocker
- **Synonyms:** S121 Medium Strength Threadlocker Stick
- **Part number:** VTS121
- **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

- 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**

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. |
| Specific Target Organ Toxicity - Single Exposure - Category 3 | H335 May cause respiratory irritation. |

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

GHS07

- Signal word Warning**- Hazard-determining components of labeling:**

2-(2-methylprop-2-enoyloxy)ethyl 2-methylprop-2-enoate
2'-phenylacetohydrazide

- Hazard statements

H315 Causes skin irritation.
H319 Causes serious eye irritation.
H317 May cause an allergic skin reaction.
H335 May cause respiratory irritation.

- Precautionary statements

| | |
|----------------|--|
| P261 | Avoid breathing dust/fume/gas/mist/vapours/spray. |
| P264 | Wash thoroughly after handling. |
| P271 | Use only outdoors or in a well-ventilated area. |
| 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. |
| P304+P340 | IF INHALED: Remove person to fresh air and keep comfortable for breathing. |
| P305+P351+P338 | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. |
| P312 | Call a poison center/doctor if you feel unwell. |
| P362+P364 | Take off contaminated clothing and wash it before reuse. |

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| | |
|-----------|---|
| 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. |
| P403+P233 | Store in a well-ventilated place. Keep container tightly closed. |
| 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: 25852-47-5 | 2-(2-methylprop-2-enoyloxy)ethyl 2-methylprop-2-enoate Skin Irritation - Category 2, H315; Eye Irritation - Category 2A, H319; Specific Target Organ Toxicity - Single Exposure - Category 3, H335 | 30 – 60% 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 | 0.1 – 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 * |

* Actual concentration ranges are withheld as a trade secret.

4 First-aid measures

- Description of first aid measures

- After inhalation:

In case of unconsciousness place patient stably in side position for transportation.
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:

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:

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.

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7 Handling and storage

- Handling:

- Precautions for safe handling

Ensure good ventilation/exhaustion at the workplace.
No special precautions are necessary if used correctly.

- **Information about protection against explosions and fires:** No special measures required.

- 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:

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 |

- **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.
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:** Pasty

- **Color:** Blue

- **Odor:** Mild

- **Odor threshold:** Not determined.

- **pH-value:** Not applicable.

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| | |
|---|---|
| - Change in condition | |
| - Melting point/Melting range: | Undetermined. |
| - Boiling point/Boiling range: | ≥ 200 °C |
| - Flash point: | ≥ 95 °C |
| - Flammability: | Not determined. |
| - 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: | n.a. hPa |
| - Density at 20 °C: | ~ 1.0665 g/cm ³ |
| - Relative density | Not determined. |
| - Vapor density | Not applicable. |
| - Evaporation rate | Not applicable. |
| - Solubility in / Miscibility with | |
| - Water: | Soluble. |
| - Partition coefficient (n-octanol/water): | Not determined. |
| - Viscosity: | |
| - Dynamic: | Not applicable. |
| - Kinematic: | Not applicable. |
| - Solvent content: | |
| - Organic solvents: | 0.9 % |
| - Water: | 0.4 % |
| - VOC content: | 0.91 % |
| - Solids content: | 96.4 % |
| - 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)

| | | |
|------------|----------|-------------------|
| Inhalative | LC50/4 h | 28,162 mg/l (rat) |
|------------|----------|-------------------|

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: 114-83-0 2'-phenylacetohydrazide

| | | |
|------|------|-------------------|
| Oral | LD50 | 270 mg/kg (mouse) |
|------|------|-------------------|

- **Primary irritant effect:**
 - **on the skin:** Irritant to skin and mucous membranes.

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

- **Carcinogenic categories**

| - IARC (International Agency for Research on Cancer) | | |
|--|--------------------|----|
| CAS: 98-82-8 | Cumene | 2B |
| CAS: 13463-67-7 | titanium dioxide | 2B |
| - 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.
 - **Recommended cleansing agent:** Water, if necessary with cleansing agents.

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: | Not applicable. |
| - 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

CAS: 98-86-2 acetophenone

- TSCA (Toxic Substances Control Act):

| | |
|--|--------|
| 2-(2-methylprop-2-enoyloxy)ethyl 2-methylprop-2-enoate | ACTIVE |
| Tetraethylene glycol hexoate | ACTIVE |
| Amorphous Silica | ACTIVE |
| Saccharin | ACTIVE |
| propane-1,2-diol | ACTIVE |
| dimethylbenzyl hydroperoxide | ACTIVE |
| Deionized water | ACTIVE |
| 2'-phenylacetohydrazide | ACTIVE |
| Cumene | ACTIVE |
| tetrasodium ethylenediaminetetraacetate | ACTIVE |
| titanium dioxide | ACTIVE |
| N-isopropylhydroxylamine | ACTIVE |
| acetophenone | ACTIVE |
| 2-Phenyl-2-propanol | ACTIVE |
| Colorant | ACTIVE |
| 1,4-naphthoquinone | ACTIVE |
| 1-hydroxyethane-1,1-diylbis(phosphonic acid) | ACTIVE |
| 2-Propanone, oxime | ACTIVE |
| phosphorous acid | ACTIVE |

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

| | |
|-----------------|--|
| CAS: 25852-47-5 | 2-(2-methylprop-2-enoyloxy)ethyl 2-methylprop-2-enoate |
| CAS: 18268-70-7 | Tetraethylene glycol hexoate |
| CAS: 67762-90-7 | Amorphous Silica |
| CAS: 128-44-9 | Saccharin |
| CAS: 57-55-6 | propane-1,2-diol |
| CAS: 80-15-9 | dimethylbenzyl hydroperoxide |
| CAS: 7732-18-5 | Deionized water |
| CAS: 114-83-0 | 2'-phenylacetohydrazide |
| CAS: 98-82-8 | Cumene |
| CAS: 64-02-8 | tetrasodium ethylenediaminetetraacetate |
| CAS: 13463-67-7 | titanium dioxide |
| CAS: 5080-22-8 | N-isopropylhydroxylamine |
| CAS: 98-86-2 | acetophenone |
| CAS: 617-94-7 | 2-Phenyl-2-propanol |
| CAS: 91-44-1 | Colorant |
| 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%)

None of the ingredients is listed.

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

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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 Affaires
- **Contact:** Safety, Health and Environmental Affaires
- **Classification System:**

- **HMIS-ratings (scale 0 - 4)**

| | | |
|------------|---|----------------|
| HEALTH | 2 | Health = 2 |
| 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** 12/04/2024 / 1

- **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

- **Disclaimer**

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