



Printing date 03/06/2019 Reviewed on 03/05/2019

1 Identification

- Product identifier

- Trade name: Vibra-TITE® Retaining Compound

- Synonyms: 530 General Purpose Retaining Compound

- Part number: VT530

- Application of the substance / the mixture

Assembly adhesive Retanning agents

- 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(s) identification

- Classification of the substance or mixture



GHS08 Health hazard

Carc. 2 H351 Suspected of causing cancer.

STOT RE 2 H373 May cause damage to organs through prolonged or repeated exposure.



Skin Irrit. 2 H315 Causes skin irritation.

Eye Irrit. 2A H319 Causes serious eye irritation.

Skin Sens. 1 H317 May cause an allergic skin reaction.

STOT SE 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 GHS08

- Signal word Warning

- Hazard-determining components of labeling:

2-(2-methylprop-2-enoyloxy)ethyl 2-methylprop-2-enoate methacrylic acid, monoester with propane-1,2-diol dimethylbenzyl hydroperoxide Methacryloxypropyltrimethoxysilane 2'-phenylacetohydrazide

- Hazard statements

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H317 May cause an allergic skin reaction.

H351 Suspected of causing cancer.

H335 May cause respiratory irritation.

H373 May cause damage to organs through prolonged or repeated exposure.

- Precautionary statements

P260

Do not breathe dust/fume/gas/mist/vapors/spray.

Printing date 03/06/2019 Reviewed on 03/05/2019

Trade name: Vibra-TITE® Retaining Compound

(Contd. of page 1)

| P261 | Avoid breathing dust/fume/gas/mist/vapors/spray |
|----------------|--|
| P264 | Wash face, hands and any exposed skin thoroughly after handling. |
| P271 | Use only outdoors or in a well-ventilated area. |
| | |
| P272 | Contaminated work clothing must not be allowed out of the workplace. |
| P280 | Wear protective gloves/protective clothing/eye protection/face protection. |
| P280 | Wear protective gloves. |
| P280 | Wear eye protection / face protection. |
| 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. |
| P308+P313 | IF exposed or concerned: Get medical advice/attention. |
| P312 | Call a poison center/doctor if you feel unwell. |
| 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. |
| P363 | Wash contaminated clothing before reuse. |
| P403+P233 | Store in a well-ventilated place. Keep container tightly closed. |
| | |

P501 Dispose of contents/container in accordance with local/regional/national/international regulations. - Additional information:

5.3 % of the mixture consists of component(s) of unknown toxicity.

Store locked up.

- Classification system:

P405

- NFPA ratings (scale 0 - 4)



- HMIS-ratings (scale 0 - 4)



- Other hazards

Results of PBT and vPvB assessment

- PBT: Not applicable.- vPvB: Not applicable.

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 | 50 – 59% |
| | Skin Irrit. 2, H315; Eye Irrit. 2A, H319; STOT SE 3, H335 | |
| CAS: 27813-02-1 | methacrylic acid, monoester with propane-1,2-diol | 10 – 19% |
| | Eye Irrit. 2A, H319; Skin Sens. 1, H317 | |
| | Acrylic polymer | 5 – 9% |
| | Combustible Dust | |
| CAS: 41637-38-1 | L | 5 – 9% |
| | Eye Irrit. 2A, H319 | |
| CAS: 39382-25-7 | 2-Butenedioic acid (2E)-, polymer with α,α'-[(1-methylethylidene)di-4,1-phenylene]bis[ω- | 5 – 9% |
| | hydroxypoly[oxy(methyl-1,2-ethanediyl)]] | |
| 040.00450 | Eye Irrit. 2A, H319 | 4 40/ |
| CAS: 80-15-9 | dimethylbenzyl hydroperoxide | 1 – 4% |
| | Self-react. F, H242; Org. Perox. E, H242; Acute Tox. 3, H311; STOT RE 2, H373; Asp. Tox. 1, H304; Eye Dam. 1, H318; Acute Tox. 4, H302; STOT SE 3, H335; Flam. Liq. 4, H227 | |
| CAS: 26936-30-1 | Methacryloxypropyltrimethoxysilane | 1 – 4% |
| | Eye Irrit. 2A, H319; Skin Sens. 1, H317 | |
| CAS: 114-83-0 | 2'-phenylacetohydrazide | ≤ 1% |
| | Acute Tox. 4, H302; Skin Irrit. 2, H315; Eye Irrit. 2A, H319; Skin Sens. 1, H317; STOT SE 3, H335 | |
| CAS: 98-82-8 | cumene | ≤ 1% |
| | Flam. Liq. 3, H226; Carc. 2, H351; Asp. Tox. 1, H304; Acute Tox. 4, H302; STOT SE 3, H335 | |

(Contd. on page 3)

Safety Data Sheet

Printing date 03/06/2019 Reviewed on 03/05/2019

Trade name: Vibra-TITE® Retaining Compound

(Contd. of page 2)

4 First-aid measures

- Description of first aid measures

After inhalation:

Supply fresh air and to be sure call for a doctor.

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.

CO2, sand, extinguishing powder. Do not use water.

- For safety reasons unsuitable extinguishing agents: Water
- 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

Wear protective equipment. Keep unprotected persons away.

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.

Do not flush with water or aqueous cleansing agents

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.

Prevent formation of aerosols.

- Information about protection against explosions and fires:

Keep ignition sources away - Do not smoke.

Protect against electrostatic charges.

- 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.
- 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 item 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.

Printing date 03/06/2019 Reviewed on 03/05/2019

Trade name: Vibra-TITE® Retaining Compound

(Contd. of page 3)

| CAS: 8 | CAS: 80-15-9 dimethylbenzyl hydroperoxide | | |
|--------|--|--|--|
| WEEL | Long-term value: 6 mg/m³, 1 ppm Skin | | |
| CAS: 9 | CAS: 98-82-8 cumene | | |
| PEL | Long-term value: 245 mg/m³, 50 ppm Skin | | |
| REL | Long-term value: 245 mg/m³, 50 ppm Skin | | |
| TLV | Long-term value: (246) NIC-0.5 mg/m³, (50) NIC-0.1 ppm NIC-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.

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:



Tightly sealed goggles

- Body protection: Protective work clothing

9 Physical and chemical properties

| - Information on basic physical and che - General Information - Appearance: | mical properties |
|---|---|
| - Form: | Fluid |
| - Color: | Green |
| - Odor: | Weak, characteristic |
| - Odor threshold: | Not determined. |
| - pH-value: | Not determined. |
| Change in condition Melting point/Melting range: Boiling point/Boiling range: | Undetermined. > 195 °C (> 383 °F) |
| - Flash point: | 95 °C (203 °F) |
| - Flammability (solid, gaseous): | Not applicable. |
| Decomposition temperature: | Not determined. |
| - Auto igniting: | Product is not selfigniting. |
| - Danger of explosion: | Product does not present an explosion hazard. |

Printing date 03/06/2019 Reviewed on 03/05/2019

Trade name: Vibra-TITE® Retaining Compound

(Contd. of page 4)

| | · · |
|---------------------------------------|--|
| - Explosion limits: - Lower: | Not determined. |
| - Upper: | Not determined. |
| - Vapor pressure at 20 °C (68 °F): | ≤ 0.1 hPa (≤ 0.1 mm Hg) |
| - Density at 20 °C (68 °F): | ~ 1.01 g/cm³ (~ 8.42845 lbs/gal) |
| - 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/wa | Iter): Not determined. |
| - Viscosity: | |
| - Dynamic at 20 °C (68 °F): | 150 mPas |
| - Kinematic: | Not determined. |
| - Solvent content: | |
| Organic solvents: | 0.7 % |
| - Water: | 1.3 % |
| - VOC content: | 0.68 % |
| | ~ 6.8 g/l / ~ 0.06 lb/gal |
| - Solids content: | 68.1 % |
| - 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: No dangerous decomposition products known.

11 Toxicological information

- Information on toxicological effects
 - Acute toxicity:

| | - ioxiony | | |
|--|---------------------------------------|-------------------------|------|
| - LD/LC50 values that are relevant for classification: ATE (Acute Toxicity Estimate) | | | |
| | | | Oral |
| Dermal | LD50 | > 24,331 mg/kg (rat) | |
| Inhalative | LC50/4 h | 13,095 mg/l (rat) | |
| CAS: 80-1 | 5-9 dimet | hylbenzyl hydroperoxide | |
| Oral | LD50 | 382 mg/kg (rat) | |
| Dermal | LD50 | 500 mg/kg (rat) | |
| Inhalative | LC50/4 h | 220 mg/l (rat) | |
| CAS: 26936-30-1 Methacryloxypropyltrimethoxysilane | | | |
| Oral | LD50 | > 2,000 mg/kg (rat) | |
| Dermal | LD50 | > 2,000 mg/kg (rat) | |
| CAS: 114- | CAS: 114-83-0 2'-phenylacetohydrazide | | |
| Oral | LD50 | 270 mg/kg (mouse) | |
| 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) | |
| - D | rimory ir | ritant affect: | |

- Primary irritant effect:
 - on the skin: Irritant to skin and mucous membranes.
 - on the eye: Irritating effect.
- Sensitization: Sensitization possible through skin contact.

Printing date 03/06/2019 Reviewed on 03/05/2019

Trade name: Vibra-TITE® Retaining Compound

- Additional toxicological information:

(Contd. of page 5)

The product shows the following dangers according to internally approved calculation methods for preparations: Irritant

- Carcinogenic categories

| - IAF | | |
|------------------|---|----|
| CAS: 98-82-8 | cumene | 28 |
| CAS: 91-20-3 | naphthalene | 28 |
| CAS: 1330-20-7 | xylene | 3 |
| - NTI | P (National Toxicology Program) | |
| CAS: 98-82-8 | cumene | F |
| CAS: 130-15-4 | 1,4-naphthoquinone | F |
| CAS: 91-20-3 | naphthalene | F |
| - <i>OS</i> | HA-Ca (Occupational Safety & Health Administration) | |
| None of the ingr | edients is listed. | |

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, ADN, IMDG, IATA | not regulated | |
| UN proper shipping name DOT, ADN, IMDG, IATA | not regulated | |
| - Transport hazard class(es) | | |
| - DOT, ADN, IMDG, IATA - Class | not regulated | |
| - Packing group - DOT, IMDG, IATA | not regulated | |
| - Environmental hazards: - Marine pollutant: | No | |
| - Special precautions for user | Not applicable. | |
| - Transport in bulk according to Annex II of I and the IBC Code | MARPOL73/78 Not applicable. | |
| - UN "Model Regulation": | not regulated | |
| | (Contd | on nage 7 |

Printing date 03/06/2019 Reviewed on 03/05/2019

Trade name: Vibra-TITE® Retaining Compound

(Contd. of page 6)

*15 Regulatory information

- Safety, health and environmental regulations/legislation specific for the substance or mixture - Sara

| - Sara | | | | |
|---------------------------|---|--|--|--|
| - Sec | tion 355 (extremely hazardous substances): | | | |
| None of the ingre | None of the ingredients is listed. | | | |
| - Sec | - Section 313 (Specific toxic chemical listings): | | | |
| CAS: 80-15-9 | dimethylbenzyl hydroperoxide | | | |
| CAS: 98-82-8 | cumene | | | |
| CAS: 91-20-3 | naphthalene | | | |
| CAS: 1330-20-7 | · · | | | |
| | Toxic Substances Control Act): | | | |
| | 2-enoyloxy)ethyl 2-methylprop-2-enoate | | | |
| | , monoester with propane-1,2-diol | | | |
| Acrylic polymer | , | | | |
| | phenol A Dimethacrylate Esters | | | |
| | cid (2E)-, polymer with α,α'-[(1-methylethylidene)di-4,1-phenylene]bis[ω-hydroxypoly[oxy(methyl-1,2-ethanediyl)]] | | | |
| coumarone-inde | | | | |
| Saccharin | | | | |
| dimethylbenzyl h | nydroperoxide | | | |
| | pyltrimethoxysilane | | | |
| propane-1,2-diol | | | | |
| 2'-phenylacetohy | | | | |
| cumene | WI GLIGO | | | |
| | eum), aromcontg. | | | |
| 2-Phenyl-2-propa | | | | |
| | leum), hydrotreated light naphthenic | | | |
| Solvent Blue 98 | icum, mydrotroated light haphtherine | | | |
| N-isopropylhydro | nyvlamina | | | |
| | vlenediaminetetraacetate | | | |
| | (petroleum), heavy arom. | | | |
| • | e-1,1-diylbis(phosphonic acid) | | | |
| 1,4-naphthoquin | | | | |
| Colorant | UIIE | | | |
| | | | | |
| naphthalene | ····· | | | |
| phosphorous aci | 2-Propanone, oxime | | | |
| | u | | | |
| xylene Deionized water | | | | |
| | CA new (21st Century Act): (Substances not listed) | | | |
| | 5 2-(2-methylprop-2-enoyloxy)ethyl 2-methylprop-2-enoate | | | |
| CAS: 114-83-0 | 2'-phenylacetohydrazide | | | |
| | - Hazardous Air Pollutants | | | |
| CAS: 98-82-8 | cumene | | | |
| CAS: 130-15-4 | 1,4-naphthoquinone | | | |
| CAS: 91-20-3 | naphthalene | | | |
| CAS: 1330-20-7 | | | | |
| - Propos | | | | |
| - | emicals known to cause cancer: | | | |
| Cite | annuais known to cause cancer. | | | |

| | - Chemicals known to cause cancer: | | | |
|---|------------------------------------|--|--|--|
| | CAS: 41637-38-1 | Ethoxylated Bisphenol A Dimethacrylate Esters | | |
| | CAS: 98-82-8 | cumene | | |
| | CAS: 91-20-3 | naphthalene | | |
| | - Chen | nicals known to cause reproductive toxicity for females: | | |
| | None of the ingred | dients is listed. | | |
| - Chemicals known to cause reproductive toxicity for males: | | | | |
| None of the ingredients is listed. | | | | |

Printing date 03/06/2019 Reviewed on 03/05/2019

Trade name: Vibra-TITE® Retaining Compound

(Contd. of page 7) Chemicals known to cause developmental toxicity: CAS: 26936-30-1 Methacryloxypropyltrimethoxysilane

- Carcinogenic categories

| - EPA | (Environmental Protection Agency) | |
|-------------------|---|--------|
| CAS: 98-82-8 | cumene | D, CBD |
| CAS: 91-20-3 | naphthalene | C, CBD |
| CAS: 1330-20-7 | xylene | I |
| - TLV | (Threshold Limit Value established by ACGIH) | |
| CAS: 91-20-3 | naphthalene | A4 |
| CAS: 1330-20-7 | xylene | A4 |
| - NIO | SH-Ca (National Institute for Occupational Safety and Health) | |
| None of the ingre | dients is listed. | |

⁻ 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 Affaires
- Contact: Safety, Health and Environmental Affaires
 - Date of preparation / last revision 03/06/2019 / 27
 - Abbreviations and acronyms:

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road) IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation IATA: International Air Transport Association

ACGIH: American Conference of Governmental Industrial Hygienists

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) NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA) 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 NIOSH: National Institute for Occupational Safety

OSHA: Occupational Safety & Health

TLV: Threshold Limit Value

PEL: Permissible Exposure Limit

REL: Recommended Exposure Limit
Flam. Liq. 3: Flammable liquids – Category 3
Flam. Liq. 4: Flammable liquids – Category 4
Self-react: F. Self-reactive substances and mixtures – Type E/F
Org. Perox. E: Organic peroxides – Type E/F

Org. Perox. E. Organic peroxides — Type E/F
Acute Tox. 4: Acute toxicity — Category 4
Acute Tox. 3: Acute toxicity — Category 3
Skin Irrit. 2: Skin corrosion/irritation — Category 2
Eye Dam. 1: Serious eye damage/eye irritation — Category 1
Eye Irrit. 2A: Serious eye damage/eye irritation — Category 2A

Skin Sens. 1: Skin sensitisation – Category 1 Carc. 2: Carcinogenicity – Category 2

STOT SE 3: Specific target organ toxicity (single exposure) – Category 3

STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2 Asp. Tox. 1: Aspiration hazard – Category 1

* Data compared to the previous version altered.

Disclaimer

The information set forth is based on information that ND Industries, Incorporated believes to be accurate. No warranty, expressed or implied, is intended. The information is provided solely for your information and consideration and ND Industries Inc. assumes no legal responsibility for use or reliance thereon. In the event of a discrepancy between the information on the non-English document and its English counterpart, the English version shall supersede.

®ND and ND Industries, Inc. are registered trademarks of ND Industries Incorporated, ®Vibra-TITE is a registered trademark of ND Industries, Inc.