

Safety Data Sheet
according to HPR, Schedule 1

Printing date 01/29/2024

Reviewed on 01/23/2024

1 Identification

- Product identifier

- **Trade name:** Vibra-TITE® Structural Adhesive
- **Synonyms:** 274 No-Mix Structural Acrylic
- **Part number:** VT274
- **Application of the substance / the mixture** Adhesives

- 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



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.



GHS05 Corrosion

Skin Corrosion - Category 1A H314 Causes severe skin burns and eye damage.
Serious Eye Damage - Category 1 H318 Causes serious eye damage.



GHS07

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



GHS05 GHS07 GHS08

- **Signal word** Danger

- Hazard-determining components of labeling:

acrylic acid
methacrylic acid, monoester with propane-1,2-diol
dimethylbenzyl hydroperoxide
Cumene
Trifunctional acid ester
2'-phenylacetohydrazide

- Hazard statements

H314 Causes severe skin burns and eye damage.
H317 May cause an allergic skin reaction.
H351 Suspected of causing cancer.

Safety Data Sheet

according to HPR, Schedule 1

Printing date 01/29/2024

Reviewed on 01/23/2024

Trade name: Vibra-TITE® Structural Adhesive

(Contd. of page 1)

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.
P301+P330+P331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P302+P352	If on skin: Wash with plenty of water.
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
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.
P310	Immediately call a poison center/doctor.
P308+P313	IF exposed or concerned: Get medical advice/attention.
P321	Specific treatment (see on this label).
P314	Get medical advice/attention if you feel unwell.
P362+P364	Take off contaminated clothing and wash it before reuse.
P333+P313	If skin irritation or rash occurs: Get medical advice/attention.
P363	Wash contaminated clothing before reuse.
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:**

	Urethane acrylate Oligomer Skin Irritation - Category 2, H315; Eye Irritation - Category 2A, H319	15 – 40% w/w
CAS: 7534-94-3	Isobornyl Methacrylate Skin Irritation - Category 2, H315; Eye Irritation - Category 2A, H319	10 – 30% w/w
CAS: 27813-02-1	methacrylic acid, monoester with propane-1,2-diol Eye Irritation - Category 2A, H319; Skin Sensitizer - Category 1, H317	10 – 30% w/w
CAS: 142-90-5	dodecyl methacrylate Specific Target Organ Toxicity - Single Exposure - Category 3, H335	5 – 10% w/w
CAS: 79-10-7	acrylic acid Flammable Liquids - Category 3, H226; Skin Corrosion - Category 1A, H314; Serious Eye Damage - Category 1, H318; Acute Toxicity (Oral) - Category 4, H302; Acute Toxicity (Dermal) - Category 4, H312; Acute Toxicity (Inhalation) - Category 4, H332	3 – 7% w/w
	Trifunctional acid ester Skin Corrosion - Category 1A, H314; Serious Eye Damage - Category 1, H318; Skin Sensitizer - Category 1, H317	1 – 5% w/w
CAS: 2530-83-8	Silane Serious Eye Damage - Category 1, H318	1 – 5% 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	1 – 5% w/w
CAS: 613-48-9	N,N-Diethyl-P-Toluidine Acute Toxicity (Oral) - Category 3, H301; Acute Toxicity (Dermal) - Category 3, H311; Acute Toxicity (Inhalation) - Category 3, H331; Specific Target Organ Toxicity - Repeated Exposure - Category 2, H373; Eye Irritation - Category 2A, H319; Flammable Liquids - Category 4, H227	0.5 – 1.5% w/w
CAS: 609-72-3	N,N-dimethyl-o-toluidine Acute Toxicity (Oral) - Category 3, H301; Acute Toxicity (Dermal) - Category 3, H311; Acute Toxicity (Inhalation) - Category 3, H331; Skin Irritation - Category 2, H315; Eye Irritation - Category 2A, H319; Flammable Liquids - Category 4, H227	0.1 – 1% w/w

(Contd. on page 3)

Safety Data Sheet

according to HPR, Schedule 1

Printing date 01/29/2024

Reviewed on 01/23/2024

Trade name: Vibra-TITE® Structural Adhesive

(Contd. of page 2)

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% w/w

4 First-aid measures

- Description of first aid measures

- General information:

Immediately remove any clothing soiled by the product.

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

- 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. Then consult a doctor.

- After swallowing: Drink copious amounts of water and provide fresh air. Immediately call a 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:** Use fire fighting measures that suit the environment.

- 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

Wear protective equipment. Keep unprotected persons away.

Ensure adequate ventilation

Wear protective clothing.

- Environmental precautions:

Inform respective authorities in case of seepage into water course or sewage system.

Do not allow to enter sewers/ surface or ground water.

- Methods and material for containment and cleaning up:

Use neutralizing agent.

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.

Prevent formation of aerosols.

- 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.

(Contd. on page 4)

Safety Data Sheet

according to HPR, Schedule 1

Printing date 01/29/2024

Reviewed on 01/23/2024

Trade name: Vibra-TITE® Structural Adhesive

(Contd. of page 3)

- **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: 79-10-7 acrylic acid	
EL (Canada)	TWA: 2 ppm Skin; R
EV (Canada)	TWA: 2 ppm
REL (USA)	TWA: 6 mg/m ³ , 2 ppm Skin
TLV (USA)	TWA: 2 ppm Skin, A3
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
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.
Avoid contact with the eyes and skin.

- **Breathing equipment:**

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



Tightly sealed goggles

- **Body protection:** Protective work clothing

(Contd. on page 5)

Safety Data Sheet

according to HPR, Schedule 1

Printing date 01/29/2024

Reviewed on 01/23/2024

Trade name: Vibra-TITE® Structural Adhesive

(Contd. of page 4)

9 Physical and chemical properties

- Information on basic physical and chemical properties	
- General Information	
- Appearance:	
- Form:	Fluid
- Color:	Amber colored
- Odor:	Characteristic
- Odor threshold:	Not determined.
- pH-value:	Not determined.
- Change in condition	
- Melting point/Melting range:	Undetermined.
- Boiling point/Boiling range:	141 °C
- Flash point:	100 °C
- Flammability (solid, gaseous):	Not applicable.
- Auto igniting:	374 °C
- 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
- Density at 20 °C:	
- 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 at 20 °C:	1,200 mPas
- Kinematic:	Not determined.
- Solvent content:	
- Organic solvents:	0.6 %
- Water:	0.1 %
- VOC content:	0.58 % 5.8 g/l / 0.05 lb/gal
- Solids content:	3.6 %
- 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.

(Contd. on page 6)

Safety Data Sheet

according to HPR, Schedule 1

Printing date 01/29/2024

Reviewed on 01/23/2024

Trade name: Vibra-TITE® Structural Adhesive

(Contd. of page 5)

11 Toxicological information

- Information on toxicological effects

- Acute toxicity:

- LD/LC50 values that are relevant for classification:

ATE (Acute Toxicity Estimate)

Oral	LD50	2,134 mg/kg
Dermal	LD50	3,029 mg/kg
Inhalative	LC50/4 h	88.4 mg/l

CAS: 79-10-7 acrylic acid

Oral	LD50	250 mg/kg (rat)
Dermal	LD50	280 mg/kg (rabbit)
Inhalative	LC50/4 h	11 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: 613-48-9 N,N-Diethyl-P-Toluidine

Oral	LD50	100 mg/kg (ATE)
Dermal	LD50	300 mg/kg (ATE)
Inhalative	LC50/4 h	3 mg/l (ATE)

CAS: 609-72-3 N,N-dimethyl-o-toluidine

Oral	LD50	100 mg/kg (ATE)
Dermal	LD50	300 mg/kg (ATE)
Inhalative	LC50/4 h	3 mg/l (ATE)

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)
------	------	-------------------

- Primary irritant effect:

- **on the skin:** Caustic effect on skin and mucous membranes.

- **on the eye:** Strong caustic effect.

- **Sensitization:** Sensitization possible through skin contact.

- Additional toxicological information:

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

Harmful

Corrosive

Irritant

Swallowing will lead to a strong caustic effect on mouth and throat and to the danger of perforation of esophagus and stomach.

- Carcinogenic categories

- IARC (International Agency for Research on Cancer)

CAS: 79-10-7	acrylic acid	3
CAS: 98-82-8	Cumene	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.

- Ecotoxicological effects:

- **Remark:** Toxic for fish

(Contd. on page 7)

Safety Data Sheet

according to HPR, Schedule 1

Printing date 01/29/2024

Reviewed on 01/23/2024

Trade name: Vibra-TITE® Structural Adhesive

(Contd. of page 6)

- Additional ecological information:**- General notes:**

Water hazard class 2 (Self-assessment): hazardous for water
 Do not allow product to reach ground water, water course or sewage system.
 Must not reach bodies of water or drainage ditch undiluted or unneutralized.
 Danger to drinking water if even small quantities leak into the ground.
 Also poisonous for fish and plankton in water bodies.
 Toxic for aquatic organisms

- 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, ADN, IMDG, IATA	not regulated
- UN proper shipping name	
- DOT/TDG, ADR, ADN, 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.

- Sara**- Section 355 (extremely hazardous substances):**

None of the ingredients is listed.

- Section 313 (Specific toxic chemical listings):

CAS: 79-10-7	acrylic acid
CAS: 80-15-9	dimethylbenzyl hydroperoxide
CAS: 98-82-8	Cumene

- TSCA (Toxic Substances Control Act):

Urethane acrylate Oligomer	ACTIVE
Isobornyl Methacrylate	ACTIVE
methacrylic acid, monoester with propane-1,2-diol	ACTIVE
dodecyl methacrylate	ACTIVE
acrylic acid	ACTIVE
Trifunctional acid ester	ACTIVE
Saccharin	ACTIVE
Silane	ACTIVE
dimethylbenzyl hydroperoxide	ACTIVE

(Contd. on page 8)

Safety Data Sheet

according to HPR, Schedule 1

Printing date 01/29/2024

Reviewed on 01/23/2024

Trade name: Vibra-TITE® Structural Adhesive

(Contd. of page 7)

N,N-Diethyl-P-Toluidine	ACTIVE
N,N-dimethyl-o-toluidine	ACTIVE
propane-1,2-diol	ACTIVE
2-(2-methylprop-2-enoyloxy)ethyl 2-methylprop-2-enoate	ACTIVE
Cumene	ACTIVE
2-Phenyl-2-propanol	ACTIVE
2'-phenylacetohydrazide	ACTIVE
Deionized water	ACTIVE
1-hydroxyethane-1,1-diylbis(phosphonic acid)	ACTIVE
tetrasodium ethylenediaminetetraacetate	ACTIVE
1,4-naphthoquinone	ACTIVE
phosphorous acid	ACTIVE

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

	Urethane acrylate Oligomer
CAS: 7534-94-3	Isobornyl Methacrylate
CAS: 27813-02-1	methacrylic acid, monoester with propane-1,2-diol
CAS: 142-90-5	dodecyl methacrylate
CAS: 79-10-7	acrylic acid
	Trifunctional acid ester
CAS: 128-44-9	Saccharin
CAS: 2530-83-8	Silane
CAS: 80-15-9	dimethylbenzyl hydroperoxide
CAS: 613-48-9	N,N-Diethyl-P-Toluidine
CAS: 609-72-3	N,N-dimethyl-o-toluidine
CAS: 57-55-6	propane-1,2-diol
CAS: 25852-47-5	2-(2-methylprop-2-enoyloxy)ethyl 2-methylprop-2-enoate
CAS: 98-82-8	Cumene
CAS: 617-94-7	2-Phenyl-2-propanol
CAS: 114-83-0	2'-phenylacetohydrazide
CAS: 7732-18-5	Deionized water
CAS: 2809-21-4	1-hydroxyethane-1,1-diylbis(phosphonic acid)
CAS: 64-02-8	tetrasodium ethylenediaminetetraacetate
CAS: 130-15-4	1,4-naphthoquinone
CAS: 13598-36-2	phosphorous acid

- Canadian Non-Domestic Substances List (NDSL)

None of the ingredients is listed.

- Canadian Ingredient Disclosure list (limit 0.1%)

None of the ingredients is listed.

- Canadian Ingredient Disclosure list (limit 1%)

CAS: 142-90-5	dodecyl methacrylate
CAS: 79-10-7	acrylic acid
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	3	Health = *3
FIRE	1	Fire = 1
REACTIVITY	0	Reactivity = 0

(Contd. on page 9)

Safety Data Sheet

according to HPR, Schedule 1

Printing date 01/29/2024

Reviewed on 01/23/2024

Trade name: Vibra-TITE® Structural Adhesive

(Contd. of page 8)

- NFPA ratings (scale 0 - 4)

Health = 3
Fire = 1
Reactivity = 0

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

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.