

Safety Data Sheet
according to HPR, Schedule 1

Printing date 01/29/2024

Reviewed on 01/10/2024

1 Identification**- Product identifier**

- **Trade name:** Vibra-TITE® UV Adhesive
- **Synonyms:** 220 Light Cure Adhesive
- **Part number:** VT220
- **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

Reproductive Toxicity - Category 2 H361 Suspected of damaging fertility or the unborn child.



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 Esters
Trifunctional acid ester
diphenyl(2,4,6- trimethylbenzoyl)phosphine oxide
methacrylic acid, monoester with propane-1,2-diol

- Hazard statements

H314 Causes severe skin burns and eye damage.
H317 May cause an allergic skin reaction.
H361 Suspected of damaging fertility or the unborn child.

- 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.

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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).
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: 5888-33-5	Acrylic Esters Skin Sensitizer - Category 1B, H317	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	7 – 13% w/w
	Trifunctional acid ester Skin Corrosion - Category 1A, H314; Serious Eye Damage - Category 1, H318; Skin Sensitizer - Category 1, H317	3 – 7% 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	1 – 5% w/w
CAS: 2530-83-8	Silane Serious Eye Damage - Category 1, H318	1 – 5% w/w
CAS: 75980-60-8	diphenyl(2,4,6- trimethylbenzoyl)phosphine oxide Reproductive Toxicity - Category 2, H361; Skin Sensitizer - Category 1, H317	1 – 5% w/w
CAS: 7473-98-5	2-hydroxy-2-methylpropiophenone Acute Toxicity (Oral) - Category 4, H302	0.5 – 1.5% w/w

4 First-aid measures

- Description of first aid measures

- **General information:** Immediately remove any clothing soiled by the product.

- 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. 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:

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.

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- 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:

- 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.

- 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: 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

- 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.

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- 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

9 Physical and chemical properties

- Information on basic physical and chemical properties**- General Information****- Appearance:****- Form:**

Viscous

- 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:

≥ 142 °C

- Flash point:

94 °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

- Density at 20 °C:~ 1.01 g/cm³**- 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:**- VOC content:**

0.00 %

0.0 g/l / 0.00 lb/gal

- Solids content:

1.8 %

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- **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:**

- **LD/LC50 values that are relevant for classification:**

ATE (Acute Toxicity Estimate)

Oral	LD50	5,985 mg/kg (rat)
Dermal	LD50	7,000 mg/kg (rabbit)
Inhalative	LC50/4 h	275 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: 75980-60-8 diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide

Oral	LD50	> 5,000 mg/kg (rat)
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CAS: 7473-98-5 2-hydroxy-2-methylpropiophenone

Oral	LD50	1,694 mg/kg (rat)
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- **Primary irritant effect:**

- **on the skin:** Strong 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:

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

- **NTP (National Toxicology Program)**

None of the ingredients 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.
- **Ecotoxicological effects:**
 - **Remark:** Very toxic for fish
- **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.
Very toxic for aquatic organisms

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- 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

<ul style="list-style-type: none"> - UN-Number - DOT/TDG, ADR, IMDG, IATA 	UN3082
<ul style="list-style-type: none"> - UN proper shipping name - DOT/TDG - ADR - IMDG - IATA 	Environmentally hazardous substance, liquid, n.o.s. (Acrylic acid, stabilized, isobornyl acrylate) UN3082 Environmentally hazardous substance, liquid, n.o.s. (Acrylic acid, stabilized, isobornyl acrylate) ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (ACRYLIC ACID, STABILIZED, isobornyl acrylate), MARINE POLLUTANT ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (ACRYLIC ACID, STABILIZED, isobornyl acrylate)
<ul style="list-style-type: none"> - Transport hazard class(es) - DOT/TDG, ADR, IMDG, IATA <div style="display: flex; align-items: center; gap: 10px;">  </div> <ul style="list-style-type: none"> - Class - Label 	9 Miscellaneous dangerous substances and articles 9
<ul style="list-style-type: none"> - Packing group - DOT/TDG, ADR, IMDG, IATA 	III
<ul style="list-style-type: none"> - Environmental hazards: - Marine pollutant: - Special marking (ADR): - Special marking (IATA): 	Product contains environmentally hazardous substances: isobornyl acrylate Yes Symbol (fish and tree) Symbol (fish and tree) Symbol (fish and tree)
<ul style="list-style-type: none"> - Special precautions for user - Hazard identification number (Kemler code): - EMS Number: - Segregation groups - Stowage Category 	Warning: Miscellaneous dangerous substances and articles 90 F-A,S-F (SGG1) Acids A
<ul style="list-style-type: none"> - Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code 	Not applicable.
<ul style="list-style-type: none"> - Transport/Additional information: - DOT/TDG - Quantity limitations - Remarks: 	On passenger aircraft/rail: 450 L On cargo aircraft only: 450 L Special marking with the symbol (fish and tree).
<ul style="list-style-type: none"> - ADR - Excepted quantities (EQ) 	Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml

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<ul style="list-style-type: none"> - IMDG - Limited quantities (LQ) - Excepted quantities (EQ) 	5L Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
<ul style="list-style-type: none"> - UN "Model Regulation": 	UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (ACRYLIC ACID, STABILIZED, ISOBORNYL ACRYLATE), 9, III

*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

- TSCA (Toxic Substances Control Act):

All components have the value ACTIVE.

- Canadian substance listings:

- Canadian Domestic Substances List (DSL)

All ingredients are listed.

- 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

- **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

- NFPA ratings (scale 0 - 4)

3	1	0	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

- * **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

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