

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® UV Adhesives
- **Synonyms:** 255 Light Cure Adhesive
- **Part number:** VT255
- **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.
Reproductive Toxicity - Category 2 H361 Suspected of damaging fertility or the unborn child.



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.
Flammable Liquids - Category 4 H227 Combustible liquid.

- 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:

Urethane acrylate oligomer
Acrylic polymer
diphenyl(2,4,6- trimethylbenzoyl)phosphine oxide
Epoxy Diacrylate
(1-methyl-1,2-ethanediy)bis[oxy(methyl-2,1-ethanediy)] diacrylate
Propoxylated neopentyl glycol diacrylate esters

- Hazard statements

H227 Combustible liquid.
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H317 May cause an allergic skin reaction.
H351 Suspected of causing cancer.
H361 Suspected of damaging fertility or the unborn child.

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- Precautionary statements

P201	Obtain special instructions before use.
P202	Do not handle until all safety precautions have been read and understood.
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P261	Avoid breathing 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.
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.
P370+P378	In case of fire: Use CO ₂ , powder or water spray to extinguish.
P403	Store in a well-ventilated place.
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 Sensitizer - Category 1B, H317; Eye Irritation - Category 2B, H320	30 – 60% w/w
	Epoxy Diacrylate Skin Irritation - Category 2, H315; Eye Irritation - Category 2A, H319; Skin Sensitizer - Category 1B, H317	10 – 30% w/w
CAS: 616-45-5	Additive Acute Toxicity (Oral) - Category 4, H302; Skin Irritation - Category 2, H315; Eye Irritation - Category 2A, H319	5 – 10% w/w
CAS: 2399-48-6	Tetrahydrofurfuryl acrylate Skin Irritation - Category 2, H315; Eye Irritation - Category 2A, H319	5 – 10% w/w
CAS: 84170-74-1	Propoxylated neopentyl glycol diacrylate esters Skin Sensitizer - Category 1B, H317; Specific Target Organ Toxicity - Single Exposure - Category 3, H335; Eye Irritation - Category 2B, H320	5 – 10% w/w
CAS: 15625-89-5	Acrylic polymer Carcinogenicity – Category 2, H351; Skin Irritation - Category 2, H315; Eye Irritation - Category 2A, H319; Skin Sensitizer - Category 1, H317	1 – 5% w/w
CAS: 42978-66-5	(1-methyl-1,2-ethanediyl)bis[oxy(methyl-2,1-ethanediyl)] diacrylate Skin Irritation - Category 2, H315; Skin Sensitizer - Category 1, H317; Specific Target Organ Toxicity - Single Exposure - Category 3, H335; Eye Irritation - Category 2B, H320	1 – 5% w/w
CAS: 7473-98-5	2-hydroxy-2-methylpropiophenone Acute Toxicity (Oral) - Category 4, H302	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

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.

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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.
 - **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:**
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:**
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 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: 15625-89-5 Acrylic polymer

WEEL (USA) TWA: 1 mg/m³
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:**
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**- Body protection:** Protective work clothing

9 Physical and chemical properties

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

Liquid

- Color:

Clear

- Odor:

Characteristic

- Odor threshold:

Not determined.

- pH-value:

Not determined.

- Change in condition**- Melting point/Melting range:**

Undetermined.

- Boiling point/Boiling range:

≥ 93 °C

- Flash point:

93 °C

- Flammability (solid, gaseous):

Not applicable.

- Auto igniting:

240 °C

- Decomposition temperature:

Not determined.

- Ignition temperature:

Product is not selfigniting.

- Danger of explosion:

Not determined.

- Explosion limits:**- Lower:**

Not determined.

- Upper:

Not determined.

- Vapor pressure:

Not determined.

- Density at 20 °C:~ 1.11035 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:**

Not determined.

- Kinematic:

Not determined.

- Solvent content:**- Organic solvents:**

3.0 %

- VOC content:

3.00 %

~ 33.3 g/l / ~ 0.28 lb/gal

- Solids content:

11.0 %

- Other information

No further relevant information available.

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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 3,494 mg/kg (rat)

CAS: 616-45-5 Additive

Oral LD50 328 mg/kg (rat)

CAS: 42978-66-5 (1-methyl-1,2-ethanediyl)bis[oxy(methyl-2,1-ethanediyl)] diacrylate

Oral LD50 5,000 mg/kg (rat)

CAS: 7473-98-5 2-hydroxy-2-methylpropiophenone

Oral LD50 1,694 mg/kg (rat)

CAS: 75980-60-8 diphenyl(2,4,6- trimethylbenzoyl)phosphine oxide

Oral LD50 > 5,000 mg/kg (rat)

- Primary irritant effect:

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

- **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: 15625-89-5 Acrylic polymer

2B

- 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:** Harmful to fish

- 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.

Harmful to 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.

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- 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. (Tetrahydrofurfuryl acrylate, Tripropylene glycol diacrylate) UN3082 Environmentally hazardous substance, liquid, n.o.s. (Tetrahydrofurfuryl acrylate, Tripropylene glycol diacrylate) ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Tetrahydrofurfuryl acrylate, Tripropylene glycol diacrylate), MARINE POLLUTANT ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Tetrahydrofurfuryl acrylate, Tripropylene glycol diacrylate)	
<ul style="list-style-type: none"> - Transport hazard class(es) - DOT/TDG, ADR, IMDG, IATA 	<div style="display: flex; align-items: center;">  </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: trimethylolpropane triacrylate Yes (DOT) 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: - Stowage Category 	Warning: Miscellaneous dangerous substances and articles 90 F-A,S-F 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: No limit On cargo aircraft only: No limit 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	
<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. (TETRAHYDROFURFURYL ACRYLATE, TRIPROPYLENE GLYCOL DIACRYLATE), 9, III	

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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):

None of the ingredients is listed.

- TSCA (Toxic Substances Control Act):

Urethane acrylate oligomer	ACTIVE
Additive	ACTIVE
Tetrahydrofurfuryl acrylate	ACTIVE
Propoxylated neopentyl glycol diacrylate esters	ACTIVE
Acrylic polymer	ACTIVE
(1-methyl-1,2-ethanediyl)bis[oxy(methyl-2,1-ethanediyl)] diacrylate	ACTIVE
2-hydroxy-2-methylpropiophenone	ACTIVE
diphenyl(2,4,6- trimethylbenzoyl)phosphine oxide	ACTIVE

- Canadian substance listings:

- Canadian Domestic Substances List (DSL)

CAS: 616-45-5	Additive
CAS: 84170-74-1	Propoxylated neopentyl glycol diacrylate esters
CAS: 15625-89-5	Acrylic polymer
CAS: 42978-66-5	(1-methyl-1,2-ethanediyl)bis[oxy(methyl-2,1-ethanediyl)] diacrylate
CAS: 7473-98-5	2-hydroxy-2-methylpropiophenone
CAS: 75980-60-8	diphenyl(2,4,6- trimethylbenzoyl)phosphine oxide

- Canadian Non-Domestic Substances List (NDSL)

CAS: 2399-48-6 Tetrahydrofurfuryl acrylate

- 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.

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	2	Health = 2
FIRE	1	Fire = 1
REACTIVITY	0	Reactivity = 0

- NFPA ratings (scale 0 - 4)

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

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- Disclaimer

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