

**Kit Components**

Product code	Description
<b>VTPB310</b>	<b>Vibra-TITE® Methacrylate Adhesives PB310 All Purpose - For Difficult-To-Bond; High Strength</b>

## Components:

VTPB310A	Vibra-TITE® Methacrylate Adhesives
VTPB310B	Vibra-TITE® Methacrylate Adhesives

**Safety Data Sheet**  
acc. to OSHA HCS

Printing date 01/26/2024

Reviewed on 01/26/2024

**1 Identification**

**- Product identifier**

- **Trade name:** Vibra-TITE® Methacrylate Adhesives
- **Synonyms:** PB310 All Purpose - For Difficult-To-Bond; High Strength - Part A
- **Part number:** VTPB310A
- **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(s) identification**

**- Classification of the substance or mixture**



GHS02 Flame

Flammable Liquids 2

H225 Highly flammable liquid and vapor.



GHS08 Health hazard

Carcinogenicity 2

H351 Suspected of causing cancer.



GHS07

Skin Irritation 2

H315 Causes skin irritation.

Eye Irritation 2A

H319 Causes serious eye irritation.

Sensitization - Skin 1

H317 May cause an allergic skin reaction.

Specific Target Organ Toxicity - Single Exposure 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**



GHS02 GHS07 GHS08

- **Signal word** Danger

**- Hazard-determining components of labeling:**

methyl methacrylate  
Cumene  
2-Butenedioic acid (2Z)  
Monofunctional acid ester

**- Hazard statements**

H225 Highly flammable liquid and vapor.  
H315 Causes skin irritation.  
H319 Causes serious eye irritation.  
H317 May cause an allergic skin reaction.  
H351 Suspected of causing cancer.

# Safety Data Sheet

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Trade name: Vibra-TITE® Methacrylate Adhesives

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H335 May cause respiratory irritation.

**- Precautionary statements**

- P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.  
 P233 Keep container tightly closed.  
 P240 Ground/bond container and receiving equipment.  
 P241 Use explosion-proof electrical/ventilating/lighting/equipment.  
 P242 Use only non-sparking tools.  
 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.  
 P303+P361+P353 If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/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.  
 P308+P313 IF exposed or concerned: Get medical advice/attention.  
 P312 Call a poison center/doctor 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.  
 P321 Specific treatment (see on this label).  
 P403+P233 Store in a well-ventilated place. Keep container tightly closed.  
 P403+P235 Store in a well-ventilated place. Keep cool.  
 P405 Store locked up.  
 P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

**- 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: 80-62-6	methyl methacrylate Flammable Liquids 2, H225; Skin Irritation 2, H315; Sensitization - Skin 1, H317; Specific Target Organ Toxicity - Single Exposure 3, H335	50 – 59%
CAS: 110-16-7	2-Butenedioic acid (2Z) Acute Toxicity - Oral 4, H302; Acute Toxicity - Dermal 4, H312; Skin Irritation 2, H315; Eye Irritation 2A, H319; Sensitization - Skin 1, H317; Specific Target Organ Toxicity - Single Exposure 3, H335	1 – 4%
CAS: 128-37-0	Butylated hydroxytoluene Acute Toxicity - Oral 4, H302; Skin Irritation 2, H315; Eye Irritation 2A, H319; Specific Target Organ Toxicity - Single Exposure 3, H336	1 – 4%
	Monofunctional acid ester Acute Toxicity - Dermal 3, H311; Skin Corrosion 1C, H314; Eye Damage 1, H318; Sensitization - Skin 1, H317	1 – 4%
CAS: 80-15-9	dimethylbenzyl hydroperoxide Self-reactive substances and mixtures - Type F, H242; Organic Peroxides - Type E, H242; Acute Toxicity - Inhalation 3, H331; Specific Target Organ Toxicity - Repeated Exposure 2, H373; Aspiration Hazard 1, H304; Skin Corrosion 1B, H314; Eye Damage 1, H318; Acute Toxicity - Oral 4, H302; Acute Toxicity - Dermal 4, H312; Specific Target Organ Toxicity - Single Exposure 3, H335; Flammable Liquids 4, H227	≤ 1%
CAS: 98-82-8	Cumene Flammable Liquids 3, H226; Carcinogenicity 2, H351; Aspiration Hazard 1, H304; Acute Toxicity - Oral 4, H302; Specific Target Organ Toxicity - Single Exposure 3, H335	≤ 1%

### 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.

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Trade name: Vibra-TITE® Methacrylate Adhesives

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- **Indication of any immediate medical attention and special treatment needed**  
No further relevant information available.

## 5 Fire-fighting measures

- **Extinguishing media**
  - **Suitable extinguishing agents:** CO<sub>2</sub>, 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
  - Keep away from ignition sources
  - Wear protective clothing.
- **Environmental precautions:** Do not allow to enter sewers/ surface or ground water.
- **Methods and material for containment and cleaning up:**
  - Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
  - 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.

<b>CAS: 80-62-6 methyl methacrylate</b>	
PEL	Long-term value: 410 mg/m <sup>3</sup> , 100 ppm
REL	Long-term value: 410 mg/m <sup>3</sup> , 100 ppm
TLV	Short-term value: 100 ppm Long-term value: 50 ppm DSEN, A4
<b>CAS: 128-37-0 Butylated hydroxytoluene</b>	
REL	Long-term value: 10 mg/m <sup>3</sup>
TLV	Long-term value: 2* mg/m <sup>3</sup> *as inhalable fraction and vapor, A4
<b>CAS: 80-15-9 dimethylbenzyl hydroperoxide</b>	
WEEL	Long-term value: 6 mg/m <sup>3</sup> , 1 ppm Skin

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Trade name: Vibra-TITE® Methacrylate Adhesives

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CAS: 98-82-8 Cumene	
PEL	Long-term value: 245 mg/m <sup>3</sup> , 50 ppm Skin
REL	Long-term value: 245 mg/m <sup>3</sup> , 50 ppm Skin
TLV	Long-term value: 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.

##### - Body protection: Protective work clothing

## 9 Physical and chemical properties

### - Information on basic physical and chemical properties

#### - General Information

##### - Appearance:

- **Form:** Viscous

- **Color:** Whitish

- **Odor:** Pungent

- **Odor threshold:** Not determined.

- **pH-value:** Not determined.

#### - Change in condition

- **Melting point/Melting range:** Undetermined.

- **Boiling point/Boiling range:** ≥ 101 °C (≥ 213.8 °F)

- **Flash point:** 10 °C (50 °F)

- **Flammability (solid, gaseous):** Highly flammable.

- **Auto igniting:** 430 °C (806 °F)

- **Decomposition temperature:** Not determined.

- **Ignition temperature:** Product is not selfigniting.

- **Danger of explosion:** Product is not explosive. However, formation of explosive air/vapor mixtures are possible.

#### - Explosion limits:

- **Lower:** 2.1 Vol %

- **Upper:** 12.5 Vol %

- **Vapor pressure at 20 °C (68 °F):** ≤ 47 hPa (≤ 35.3 mm Hg)

- **Density at 20 °C (68 °F):** ~ 0.96 g/cm<sup>3</sup> (~ 8.0112 lbs/gal)

- **Relative density:** Not determined.

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Trade name: Vibra-TITE® Methacrylate Adhesives

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- 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 (68 °F):	60,000 mPas
- Kinematic:	Not determined.
- Solvent content:	
- Organic solvents:	0.1 %
- VOC content:	0.13 % ~ 1.2 g/l / ~ 0.01 lb/gal
- Solids content:	40.7 %
- 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	12,663 mg/kg (rat)
Dermal	LD50	13,220 mg/kg
Inhalative	LC50/4 h	26,190 mg/l (rat)

#### CAS: 80-62-6 methyl methacrylate

Oral	LD50	7,872 mg/kg (rat)
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#### CAS: 110-16-7 2-Butenedioic acid (2Z)

Oral	LD50	708 mg/kg (rat)
Dermal	LD50	1,560 mg/kg (rabbit)

#### CAS: 128-37-0 Butylated hydroxytoluene

Oral	LD50	890 mg/kg (rat)
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#### Monofunctional acid ester

Dermal	LD50	300 mg/kg (ATE)
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#### 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: 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)

### - 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

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Trade name: Vibra-TITE® Methacrylate Adhesives

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### - Carcinogenic categories

#### - IARC (International Agency for Research on Cancer)

CAS: 80-62-6	methyl methacrylate	3
CAS: 128-37-0	Butylated hydroxytoluene	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

#### - OSHA-Ca (Occupational Safety & Health Administration)

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.

### - 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, IMDG, IATA** UN2924

### - UN proper shipping name

- **DOT** Flammable liquids, corrosive, n.o.s. (Methyl methacrylate monomer, stabilized, 2-Butenedioic acid (2Z))  
 - **IMDG, IATA** FLAMMABLE LIQUID, CORROSIVE, N.O.S. (METHYL METHACRYLATE MONOMER, STABILIZED, 2-Butenedioic acid (2Z))

### - Transport hazard class(es)

#### - DOT



- **Class** 3 Flammable liquids  
 - **Label** 3, 8

#### - IMDG



- **Class** 3 Flammable liquids

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Trade name: Vibra-TITE® Methacrylate Adhesives

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- Label	3/8
- IATA	
	
- Class	3 Flammable liquids
- Label	3 (8)
- Packing group	
- DOT, IMDG, IATA	II
- Environmental hazards:	
- Marine pollutant:	No
- Special precautions for user	Warning: Flammable liquids
- Hazard identification number (Kemler code):	338
- EMS Number:	F-E, S-C
- Segregation groups	(SGG1) Acids
- Stowage Category	B
- Stowage Code	SW2 Clear of living quarters.
- Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable.
- Transport/Additional information:	
- DOT	
- Quantity limitations	On passenger aircraft/rail: 1 L On cargo aircraft only: 5 L
- IMDG	
- Limited quantities (LQ)	1L
- Excepted quantities (EQ)	Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml
- UN "Model Regulation":	UN 2924 FLAMMABLE LIQUID, CORROSIVE, N.O.S. (METHYL METHACRYLATE MONOMER, STABILIZED, 2-BUTENEDIOIC ACID (2Z)), 3 (8), II

## 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: 80-62-6	methyl methacrylate
	Monofunctional acid ester
CAS: 80-15-9	dimethylbenzyl hydroperoxide
CAS: 98-82-8	Cumene
CAS: 98-86-2	acetophenone

#### - TSCA (Toxic Substances Control Act):

All components have the value ACTIVE.

#### - Hazardous Air Pollutants

CAS: 80-62-6	methyl methacrylate
CAS: 98-82-8	Cumene
CAS: 98-86-2	acetophenone
CAS: 130-15-4	1,4-naphthoquinone

#### - Proposition 65

#### - Chemicals known to cause cancer:

Chlorosulfanated polyethylene
Impact modifying resin

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Trade name: Vibra-TITE® Methacrylate Adhesives

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CAS: 98-82-8	Cumene	
<b>- Chemicals known to cause reproductive toxicity for females:</b>		
Impact modifying resin		
Monofunctional acid ester		
<b>- Chemicals known to cause reproductive toxicity for males:</b>		
Impact modifying resin		
Monofunctional acid ester		
<b>- Chemicals known to cause developmental toxicity:</b>		
Monofunctional acid ester		
<b>- Carcinogenic categories</b>		
<b>- EPA (Environmental Protection Agency)</b>		
CAS: 80-62-6	methyl methacrylate	E, NL
CAS: 98-82-8	Cumene	D, CBD
CAS: 98-86-2	acetophenone	D
<b>- TLV (Threshold Limit Value)</b>		
CAS: 80-62-6	methyl methacrylate	A4
CAS: 128-37-0	Butylated hydroxytoluene	A4
<b>- NIOSH-Ca (National Institute for Occupational Safety and Health)</b>		
None of the ingredients is listed.		
<b>- Chemical safety assessment:</b> 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	3	Fire = 3
REACTIVITY	0	Reactivity = 0

### - NFPA ratings (scale 0 - 4)

3	Health = 2
2	Fire = 3
0	Reactivity = 0

### - Date of preparation / last revision 01/26/2024

### - Abbreviations and acronyms:

ADR: Accord relatif au transport international 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

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

NIOSH: National Institute for Occupational Safety

OSHA: Occupational Safety & Health

TLV: Threshold Limit Value

PEL: Permissible Exposure Limit

REL: Recommended Exposure Limit

Flammable Liquids 2: Flammable liquids – Category 2

Flammable Liquids 3: Flammable liquids – Category 3

Flammable Liquids 4: Flammable liquids – Category 4

Self-reactive substances and mixtures - Type F: Self-reactive substances and mixtures – Type F

Organic Peroxides - Type E: Organic peroxides – Type E/F

Acute Toxicity - Oral 4: Acute toxicity – Category 4

Acute Toxicity - Dermal 3: Acute toxicity – Category 3

Skin Corrosion 1B: Skin corrosion/irritation – Category 1B

Skin Corrosion 1C: Skin corrosion/irritation – Category 1C

Skin Irritation 2: Skin corrosion/irritation – Category 2

Eye Damage 1: Serious eye damage/eye irritation – Category 1

Eye Irritation 2A: Serious eye damage/eye irritation – Category 2A

Sensitization - Skin 1: Skin sensitisation – Category 1

Carcinogenicity 2: Carcinogenicity – Category 2

Specific Target Organ Toxicity - Single Exposure 3: Specific target organ toxicity (single exposure) – Category 3

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Specific Target Organ Toxicity - Repeated Exposure 2: Specific target organ toxicity (repeated exposure) – Category 2  
Aspiration Hazard 1: Aspiration hazard – Category 1

- \* **Data compared to the previous version altered.**

- **Disclaimer**

The information set forth is based on information that M. Lemieux, Inc. believes to be accurate. No warranty, expressed or implied, is intended. The information is provided solely for your information and consideration and M. Lemieux, Inc. assumes no legal responsibility for use or reliance thereon.

**Safety Data Sheet**  
acc. to OSHA HCS

Printing date 01/26/2024

Reviewed on 07/07/2023

**1 Identification**

**- Product identifier**

- **Trade name:** Vibra-TITE® Methacrylate Adhesives
- **Synonyms:** PB310 All Purpose - For Difficult-To-Bond; High Strength - Part B
- **Part number:** VTPB310B
- **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(s) identification**

**- Classification of the substance or mixture**



GHS02 Flame

Flammable Liquids 2

H225 Highly flammable liquid and vapor.



GHS07

Skin Irritation 2

H315 Causes skin irritation.

Sensitization - Skin 1

H317 May cause an allergic skin reaction.

Specific Target Organ Toxicity - Single Exposure 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**



GHS02 GHS07

**- Signal word** Danger

**- Hazard-determining components of labeling:**

methyl methacrylate

**- Hazard statements**

H225 Highly flammable liquid and vapor.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H335 May cause respiratory irritation.

**- Precautionary statements**

P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

P233 Keep container tightly closed.

P240 Ground/bond container and receiving equipment.

P241 Use explosion-proof electrical/ventilating/lighting/equipment.

P242 Use only non-sparking tools.

P243 Take precautionary measures against static discharge.

P264 Wash 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.

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Printing date 01/26/2024

Reviewed on 07/07/2023

**Trade name:** Vibra-TITE® Methacrylate Adhesives

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P280	Wear protective gloves/protective clothing/eye protection/face protection.
P280	Wear protective gloves.
P303+P361+P353	If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P312	Call a poison center/doctor 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).
P403+P233	Store in a well-ventilated place. Keep container tightly closed.
P403+P235	Store in a well-ventilated place. Keep cool.
P405	Store locked up.
P501	Dispose of contents/container in accordance with local/regional/national/international regulations.

**- 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: 80-62-6	methyl methacrylate Flammable Liquids 2, H225; Skin Irritation 2, H315; Sensitization - Skin 1, H317; Specific Target Organ Toxicity - Single Exposure 3, H335	70 – 79%
CAS: 34562-31-7	3,5-diethyl-1,2-dihydro-1-phenyl-2-propylpyridine Acute Toxicity - Oral 4, H302; Acute Toxicity - Dermal 4, H312; Skin Irritation 2, H315; Eye Irritation 2B, H320	1 – 4%
CAS: 128-37-0	Butylated hydroxytoluene Acute Toxicity - Oral 4, H302; Skin Irritation 2, H315; Eye Irritation 2A, H319; Specific Target Organ Toxicity - Single Exposure 3, H336	≤ 1%

### 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.

- **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:** CO<sub>2</sub>, 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

Keep away from ignition sources

Wear protective clothing.

- **Environmental precautions:** Do not allow to enter sewers/ surface or ground water.

**- Methods and material for containment and cleaning up:**

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

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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 remaining constituent has no known exposure limits.

<b>CAS: 80-62-6 methyl methacrylate</b>	
PEL	Long-term value: 410 mg/m <sup>3</sup> , 100 ppm
REL	Long-term value: 410 mg/m <sup>3</sup> , 100 ppm
TLV	Short-term value: 100 ppm Long-term value: 50 ppm DSEN, A4
<b>CAS: 128-37-0 Butylated hydroxytoluene</b>	
REL	Long-term value: 10 mg/m <sup>3</sup>
TLV	Long-term value: 2* mg/m <sup>3</sup> *as inhalable fraction and vapor, A4

**- 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 skin.  
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.

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**- Eye protection:**

Tightly sealed goggles

**- Body protection:** Protective work clothing

## 9 Physical and chemical properties

<b>- Information on basic physical and chemical properties</b>	
<b>- General Information</b>	
<b>- Appearance:</b>	
<b>- Form:</b>	Viscous
<b>- Color:</b>	Whitish
<b>- Odor:</b>	Pungent
<b>- Odor threshold:</b>	Not determined.
<b>- pH-value:</b>	Not determined.
<b>- Change in condition</b>	
<b>- Melting point/Melting range:</b>	Undetermined.
<b>- Boiling point/Boiling range:</b>	≥ 101 °C (≥ 213.8 °F)
<b>- Flash point:</b>	10 °C (50 °F)
<b>- Flammability (solid, gaseous):</b>	Highly flammable.
<b>- Auto igniting:</b>	430 °C (806 °F)
<b>- Decomposition temperature:</b>	Not determined.
<b>- Ignition temperature:</b>	Product is not selfigniting.
<b>- Danger of explosion:</b>	Product is not explosive. However, formation of explosive air/vapor mixtures are possible.
<b>- Explosion limits:</b>	
<b>- Lower:</b>	2.1 Vol %
<b>- Upper:</b>	12.5 Vol %
<b>- Vapor pressure at 20 °C (68 °F):</b>	≤ 47 hPa (≤ 35.3 mm Hg)
<b>- Density at 20 °C (68 °F):</b>	~ 1.25 g/cm <sup>3</sup> (~ 10.43125 lbs/gal)
<b>- Relative density</b>	Not determined.
<b>- Vapor density</b>	Not determined.
<b>- Evaporation rate</b>	Not determined.
<b>- Solubility in / Miscibility with</b>	
<b>- Water:</b>	Not miscible or difficult to mix.
<b>- Partition coefficient (n-octanol/water):</b>	Not determined.
<b>- Viscosity:</b>	
<b>- Dynamic at 20 °C (68 °F):</b>	100,000 mPas
<b>- Kinematic:</b>	Not determined.
<b>- Solvent content:</b>	
<b>- VOC content:</b>	0.00 % 0.0 g/l / 0.00 lb/gal
<b>- Solids content:</b>	26.7 %
<b>- Other information</b>	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.

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## 11 Toxicological information

### - Information on toxicological effects

#### - Acute toxicity:

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

#### ATE (Acute Toxicity Estimate)

Oral LD50 16,330 mg/kg

Dermal LD50 44,000 mg/kg

#### CAS: 80-62-6 methyl methacrylate

Oral LD50 7,872 mg/kg (rat)

#### CAS: 34562-31-7 3,5-diethyl-1,2-dihydro-1-phenyl-2-propylpyridine

Oral LD50 500 mg/kg (ATE)

Dermal LD50 1,100 mg/kg (ATE)

#### CAS: 128-37-0 Butylated hydroxytoluene

Oral LD50 890 mg/kg (rat)

#### - Primary irritant effect:

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

- **on the eye:** No 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: 80-62-6 methyl methacrylate

3

CAS: 128-37-0 Butylated hydroxytoluene

3

##### - NTP (National Toxicology Program)

None of the ingredients is listed.

##### - OSHA-Ca (Occupational Safety & Health Administration)

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.

### - 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, IMDG, IATA**

UN1133

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- <b>UN proper shipping name</b> - DOT - IMDG, IATA	Adhesives ADHESIVES
- <b>Transport hazard class(es)</b> - DOT	
	
- Class - Label	3 Flammable liquids 3
- <b>IMDG, IATA</b>	
	
- Class - Label	3 Flammable liquids 3
- <b>Packing group</b> - DOT, IMDG, IATA	III
- <b>Environmental hazards:</b> - Marine pollutant:	No
- <b>Special precautions for user</b> - Hazard identification number (Kemler code): - EMS Number: - Stowage Category	Warning: Flammable liquids - F-E,S-D A
- <b>Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code</b>	Not applicable.
- <b>Transport/Additional information:</b> - DOT - Quantity limitations	On passenger aircraft/rail: 60 L On cargo aircraft only: 220 L
- <b>IMDG</b> - 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
- <b>UN "Model Regulation":</b>	UN 1133 ADHESIVES, 3, 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: 80-62-6 methyl methacrylate

CAS: 13395-16-9 copper(II) 4-oxopent-2-en-2-olate

#### - TSCA (Toxic Substances Control Act):

All components have the value ACTIVE.

#### - Hazardous Air Pollutants

CAS: 80-62-6 methyl methacrylate

#### - Proposition 65

#### - Chemicals known to cause cancer:

Impact modifying resin

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<b>- Chemicals known to cause reproductive toxicity for females:</b>	
Impact modifying resin	
<b>- Chemicals known to cause reproductive toxicity for males:</b>	
Impact modifying resin	
<b>- Chemicals known to cause developmental toxicity:</b>	
None of the ingredients is listed.	
<b>- Carcinogenic categories</b>	
<b>- EPA (Environmental Protection Agency)</b>	
CAS: 80-62-6	methyl methacrylate E, NL
<b>- TLV (Threshold Limit Value)</b>	
CAS: 80-62-6	methyl methacrylate A4
CAS: 128-37-0	Butylated hydroxytoluene A4
<b>- NIOSH-Ca (National Institute for Occupational Safety and Health)</b>	
None of the ingredients is listed.	
<b>- Chemical safety assessment:</b> 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	1	Health = 1
FIRE	3	Fire = 3
REACTIVITY	0	Reactivity = 0

### - NFPA ratings (scale 0 - 4)

1	3	0	Health = 1
			Fire = 3
			Reactivity = 0

### - Date of preparation / last revision 01/26/2024

### - Abbreviations and acronyms:

ADR: Accord relatif au transport international 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  
 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  
 NIOSH: National Institute for Occupational Safety  
 OSHA: Occupational Safety & Health  
 TLV: Threshold Limit Value  
 PEL: Permissible Exposure Limit  
 REL: Recommended Exposure Limit  
 Flammable Liquids 2: Flammable liquids – Category 2  
 Acute Toxicity - Oral 4: Acute toxicity – Category 4  
 Skin Irritation 2: Skin corrosion/irritation – Category 2  
 Eye Irritation 2A: Serious eye damage/eye irritation – Category 2A  
 Eye Irritation 2B: Serious eye damage/eye irritation – Category 2B  
 Sensitization - Skin 1: Skin sensitisation – Category 1  
 Specific Target Organ Toxicity - Single Exposure 3: Specific target organ toxicity (single exposure) – Category 3

### - \* Data compared to the previous version altered.

### - Disclaimer

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