

Safety Data Sheet
according to HPR, Schedule 1

Printing date 01/29/2024

Reviewed on 01/26/2024

1 Identification

- Product identifier

- **Trade name:** Vibra-TITE® Methacrylate Adhesives
- **Synonyms:** PB320 All Purpose - Medium Set Time; High Strength - Part B
- **Part number:** VTPB320B
- **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.



GHS07

Acute Toxicity (Inhalation) - Category 4	H332 Harmful if inhaled.
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.
Specific Target Organ Toxicity - Single Exposure - Category 3	H335 May cause respiratory irritation.
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:

Bisphenol-A epoxy resin
dimethylbenzyl hydroperoxide
Cumene
benzoyl peroxyde

- Hazard statements

H227 Combustible liquid.
H332 Harmful if inhaled.
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H317 May cause an allergic skin reaction.

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H351 Suspected of causing cancer.
 H335 May cause respiratory irritation.
 H373 May cause damage to organs through prolonged or repeated exposure.

- Precautionary statements

P201 Obtain special instructions before use.
 P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
 P260 Do not breathe dust/fume/gas/mist/vapours/spray.
 P264 Wash thoroughly after handling.
 P271 Use only outdoors or in a well-ventilated area.
 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.
 P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
 P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 P308+P313 IF exposed or concerned: Get medical advice/attention.
 P312 Call a poison center/doctor if you feel unwell.
 P314 Get medical advice/attention if you feel unwell.
 P362+P364 Take off contaminated clothing and wash it before reuse.
 P332+P313 If skin irritation occurs: Get medical advice/attention.
 P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
 P321 Specific treatment (see on this label).
 P337+P313 If eye irritation persists: Get medical advice/attention.
 P370+P378 In case of fire: Use CO₂, powder or water spray to extinguish.
 P403+P233 Store in a well-ventilated place. Keep container tightly closed.
 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:

CAS: 25068-38-6	Bisphenol-A epoxy resin Skin Irritation - Category 2, H315; Eye Irritation - Category 2A, H319; Skin Sensitizer - Category 1, H317; Specific Target Organ Toxicity - Single Exposure - Category 3, H335	30 – 60% w/w
CAS: 94-36-0	benzoyl peroxyde Organic Peroxides – Type B, H241; Eye Irritation - Category 2A, H319; Skin Sensitizer - Category 1, H317	10 – 30% w/w
CAS: 131298-44-7	branched C10-alkyl benzoates Acute Toxicity (Inhalation) - Category 4, H332	5 – 10% w/w
CAS: 1317-65-3	Calcium Carbonate Skin Irritation - Category 2, H315	3 – 7% 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: 557-05-1	zinc distearate Specific Target Organ Toxicity - Single Exposure - Category 3, H335	1 – 5% w/w
CAS: 69012-64-2	Silica-Amorphous Silica fume	1 – 5% w/w
CAS: 128-37-0	Butylated hydroxytoluene Acute Toxicity (Oral) - Category 4, H302; Skin Irritation - Category 2, H315; Eye Irritation - Category 2A, H319; Specific Target Organ Toxicity - Single Exposure - Category 3, H336	0.1 – 1% w/w
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

4 First-aid measures

- Description of first aid measures**- General information:**

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

- 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.

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Supply fresh air; consult doctor in case of complaints.

- **After skin contact:** Immediately wash with water and soap and rinse thoroughly.
- **After eye contact:** Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
- **After swallowing:** If symptoms persist consult doctor.
- **Information for doctor:**
 - **Most important symptoms and effects, both acute and delayed** No further relevant information available.
 - **Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

5 Fire-fighting measures

- **Extinguishing media**
 - **Suitable extinguishing agents:** CO₂, 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:**
 - 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**
 - Ensure adequate ventilation
 - Keep away from ignition sources
 - 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:**
 - Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
 - 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:**
 - 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: 1317-65-3 Calcium Carbonate

EL (Canada)	STEL: 20* mg/m ³ TWA: 10* 3** mg/m ³ *total dust;**respirable fraction
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CAS: 80-15-9 dimethylbenzyl hydroperoxide	
WEEL (USA)	TWA: 6 mg/m ³ , 1 ppm Skin
CAS: 557-05-1 zinc distearate	
EL (Canada)	STEL: 20* mg/m ³ TWA: 10* 3** mg/m ³ *total dust; **respirable dust
PEL (USA)	TWA: 15* 5** mg/m ³ *total dust **respirable fraction
REL (USA)	TWA: 10* 5** mg/m ³ *total dust **respirable fraction
TLV (USA)	TWA: 10* 3** mg/m ³ *inhalable, **respirable particulate matter, *A4
CAS: 69012-64-2 Silica-Amorphous Silica fume	
EL (Canada)	TWA: 4* 1.5** mg/m ³ fume *total; **respirable
EV (Canada)	TWA: 2 mg/m ³ respirable
TLV (USA)	TLV withdrawn
CAS: 128-37-0 Butylated hydroxytoluene	
EL (Canada)	TWA: 2 mg/m ³ vapour and inhalable aerosol
EV (Canada)	TWA: 2 mg/m ³ inhalable, vapour and aerosol
REL (USA)	TWA: 10 mg/m ³
TLV (USA)	TWA: 2* mg/m ³ *as inhalable fraction and vapor, A4
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

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- 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:	≥ 260 °C
- Flash point:	84 °C
- Flammability (solid, gaseous):	May cause fire.
- 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 at 20 °C:	< 1 hPa
- Density at 20 °C:	~ 0.96 g/cm ³
- 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:	100,000 mPas
- Kinematic:	Not determined.
- Solvent content:	
- Organic solvents:	0.3 %
- VOC content:	0.30 %
	~ 2.9 g/l / ~ 0.02 lb/gal
- Solids content:	47.2 %
- 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.

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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	12,953 mg/kg (rat)
Dermal	LD50	19,841 mg/kg (rat)
Inhalative	LC50/4 h	18.7 mg/l
CAS: 131298-44-7 branched C10-alkyl benzoates		
Inhalative	LC50/4 h	1.5 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: 557-05-1 zinc distearate		
Oral	LD50	10,000 mg/kg (rat)
CAS: 128-37-0 Butylated hydroxytoluene		
Oral	LD50	890 mg/kg (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:

Harmful

Irritant

- Carcinogenic categories

- IARC (International Agency for Research on Cancer)

CAS: 94-36-0	benzoyl peroxyde	3
CAS: 69012-64-2	Silica-Amorphous Silica fume	3
CAS: 128-37-0	Butylated hydroxytoluene	3
CAS: 98-82-8	Cumene	2B

- NTP (National Toxicology Program)

CAS: 98-82-8	Cumene	R
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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

- 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.

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.

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- **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, IMDG, IATA	UN3082
- UN proper shipping name - DOT/TDG	Environmentally hazardous substance, liquid, n.o.s. (bisphenol-A-(epichlorhydrin); epoxy resin, dimethylbenzyl hydroperoxide)
- ADR	UN3082 Environmentally hazardous substance, liquid, n.o.s. (bisphenol-A-(epichlorhydrin); epoxy resin, dimethylbenzyl hydroperoxide)
- IMDG	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (bisphenol-A-(epichlorhydrin); epoxy resin, dimethylbenzyl hydroperoxide), MARINE POLLUTANT
- IATA	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (bisphenol-A-(epichlorhydrin); epoxy resin, dimethylbenzyl hydroperoxide)
- Transport hazard class(es) - DOT/TDG, ADR, IMDG, IATA	
	
- Class - Label	9 Miscellaneous dangerous substances and articles 9
- Packing group - DOT/TDG, ADR, IMDG, IATA	III
- Environmental hazards:	Product contains environmentally hazardous substances: bisphenol-A-(epichlorhydrin); epoxy resin
- Marine pollutant:	Yes
- Special marking (ADR):	Symbol (fish and tree)
- Special marking (IATA):	Symbol (fish and tree)
- 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
- Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable.
- Transport/Additional information:	
- DOT/TDG - Quantity limitations	On passenger aircraft/rail: No limit On cargo aircraft only: No limit
- Remarks:	Special marking with the symbol (fish and tree).
- ADR - Excepted quantities (EQ)	Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
- IMDG - Limited quantities (LQ)	5L

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- Excepted quantities (EQ)	Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
- UN "Model Regulation":	UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (BISPHENOL-A-(EPICHLORHYDRIN); EPOXY RESIN, DIMETHYLBENZYL HYDROPEROXIDE), 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: 94-36-0	benzoyl peroxyde
CAS: 80-15-9	dimethylbenzyl hydroperoxide
CAS: 557-05-1	zinc distearate
CAS: 98-82-8	Cumene

- TSCA (Toxic Substances Control Act):

All components have the value ACTIVE.

- Canadian substance listings:

- Canadian Domestic Substances List (DSL)

CAS: 25068-38-6	Bisphenol-A epoxy resin
CAS: 94-36-0	benzoyl peroxyde
CAS: 131298-44-7	branched C10-alkyl benzoates
CAS: 25852-37-3	Butyl acrylate-methyl methacrylate polymer
CAS: 80-15-9	dimethylbenzyl hydroperoxide
CAS: 557-05-1	zinc distearate
CAS: 67762-90-7	Amorphous Silica
CAS: 69012-64-2	Silica-Amorphous Silica fume
CAS: 128-37-0	Butylated hydroxytoluene
CAS: 98-82-8	Cumene
CAS: 617-94-7	2-Phenyl-2-propanol
CAS: 471-34-1	calcium carbonate
	Polymerization inhibitor

- Canadian Non-Domestic Substances List (NDSL)

CAS: 1317-65-3 Calcium Carbonate

- Canadian Ingredient Disclosure list (limit 0.1%)

None of the ingredients is listed.

- Canadian Ingredient Disclosure list (limit 1%)

CAS: 94-36-0	benzoyl peroxyde
CAS: 80-15-9	dimethylbenzyl hydroperoxide
CAS: 557-05-1	zinc distearate
CAS: 128-37-0	Butylated hydroxytoluene

- 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	2	Fire = 2
REACTIVITY	0	Reactivity = 0

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- NFPA ratings (scale 0 - 4)

Health = 2
Fire = 2
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**

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