

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

Printing date 05/01/2015

Reviewed on 05/01/2015

**1 Identification**

**- Product identifier**

- **Trade name:** Vibra-TITE® Methacrylate Adhesives
  - **Synonyms:** PB320 All Purpose - Medium Set Time; High Strength - Part B
  - **Part number:** VTPB320B
- **Relevant identified uses of the substance or mixture** Adhesive

**- 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**



GHS07

Acute Tox. 4 H302	Harmful if swallowed.
Skin Irrit. 2 H315	Causes skin irritation.
Eye Irrit. 2A H319	Causes serious eye irritation.
Skin Sens. 1 H317	May cause an allergic skin reaction.
STOT SE 3 H335-H336	May cause respiratory irritation. May cause drowsiness or dizziness.
Flam. Liq. 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

- **Signal word** Warning

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

Polyester catalyst  
Bisphenol-A epoxy resin  
Cumene hydroperoxide

**- Hazard statements**

H227	Combustible liquid.
H302	Harmful if swallowed.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H317	May cause an allergic skin reaction.
H335-H336	May cause respiratory irritation. May cause drowsiness or dizziness.

**- Precautionary statements**

P210	Keep away from flames and hot surfaces. – No smoking.
P261	Avoid breathing dust/fume/gas/mist/vapors/spray
P280	Wear protective gloves / eye protection / face protection.
P280	Wear protective gloves.
P280	Wear eye protection / face protection.
P305+P351+P338	If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P301+P312	If swallowed: Call a poison center/doctor if you feel unwell.
P304+P340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

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P363	Wash contaminated clothing before reuse.
P405	Store locked up.
P403+P233	Store in a well-ventilated place. Keep container tightly closed.
P501	Dispose of contents/container in accordance with local/regional/national/international regulations.

**- Classification system:****- NFPA ratings (scale 0 - 4)**

	Health = 2
	Fire = 2
	Reactivity = 0

**- HMIS-ratings (scale 0 - 4)**

	Health = *2
	Fire = 2
	Reactivity = 0

**- 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:**

25068-38-6	Bisphenol-A epoxy resin	40-50%
	Polyester catalyst	30-40%
80-15-9	Cumene hydroperoxide	1-5%
67762-90-7	Synthetic amorphous silica (fumed)	1-5%
128-37-0	Antioxidant	≤ 1.00%

**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.

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:** 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>, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

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:**

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.

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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 item 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:** Protect from heat.

**- 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.

Protect from heat and direct sunlight.

**- 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 item 7.

**- Control parameters**

**- Components with limit values that require monitoring at the workplace:**

**80-15-9 Cumene hydroperoxide**

WEEL	Long-term value: 6 mg/m <sup>3</sup> , 1 ppm
	Skin

**128-37-0 Antioxidant**

REL	Long-term value: 10 mg/m <sup>3</sup>
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TLV	Long-term value: 2* mg/m <sup>3</sup>
	*as inhalable fraction and vapor

**- 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.

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

Viscous

**- Color:**

Whitish

**- Odor:**

Pungent

**- Odour threshold:**

Not determined.

**- pH-value:**

Not determined.

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

Undetermined.

**- Boiling point/Boiling range:**

101 °C (214 °F)

**- Flash point:**

84 °C (183 °F)

**- Flammability (solid, gaseous):**

Not applicable.

**- Ignition temperature:****- Decomposition temperature:**

Not determined.

**- Auto igniting:**

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 (68 °F):**0.96 g/cm<sup>3</sup> (8.011 lbs/gal)**- Relative density**

Not determined.

**- Vapour 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):**

100000 mPas

**- Kinematic:**

Not determined.

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

0.0 %

**- Solids content:**

57.0 %

**- Other information**

No further relevant information available.

**10 Stability and reactivity****- Reactivity****- 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:

Polyester catalyst		
Oral	LD50	100 mg/kg (ATE)
80-15-9 Cumene hydroperoxide		
Oral	LD50	382 mg/kg (rat)
Dermal	LD50	500 mg/kg (rat)
Inhalative	LC50/4 h	220 mg/l (rat)
128-37-0 Antioxidant		
Oral	LD50	890 mg/kg (rat)

#### - Primary irritant effect:

- **on the skin:** Irritant to skin and mucous membranes.
- **on the eye:** Strong irritant with the danger of severe eye injury.

#### - Sensitization:

#### - 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)

128-37-0	Antioxidant	3
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#### - 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.

### - 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.

- **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**

not regulated

- **IMDG, IATA**

UN3082

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- <b>UN proper shipping name</b> - DOT - IMDG  - IATA	not regulated ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight ≤ 700), Cumene hydroperoxide), MARINE POLLUTANT ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight ≤ 700), Cumene hydroperoxide)
- <b>Transport hazard class(es)</b> - DOT - Class	not regulated
- <b>IMDG, IATA</b>  - Class - Label	9 Miscellaneous dangerous substances and articles 9
- <b>Packing group</b> - DOT - IMDG, IATA	not regulated III
- <b>Environmental hazards:</b>  - <b>Marine pollutant:</b>  - <b>Special marking (IATA):</b>	Product contains environmentally hazardous substances: reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight ≤ 700) Yes Symbol (fish and tree) Symbol (fish and tree)
- <b>Special precautions for user</b> - <b>Danger code (Kemler):</b> - <b>EMS Number:</b>	Warning: Miscellaneous dangerous substances and articles 90 F-A,S-F
- <b>Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code</b>	Not applicable.
- <b>Transport/Additional information:</b>  - <b>IMDG</b> - <b>Limited quantities (LQ)</b> - <b>Excepted quantities (EQ)</b>	5L Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
- <b>UN "Model Regulation":</b>	UN3082, Environmentally hazardous substances, liquid, n.o.s. (reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight ≤ 700), Cumene hydroperoxide), 9, III

**15 Regulatory information**

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**  
- Sara

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

None of the ingredients is listed.

- **Section 313 (Specific toxic chemical listings):**

80-15-9 Cumene hydroperoxide

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

Bisphenol-A epoxy resin

Cumene hydroperoxide

Synthetic amorphous silica (fumed)

Antioxidant

- **Proposition 65**- **Chemicals known to cause cancer:**

None of the ingredients is listed.

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<b>- Chemicals known to cause reproductive toxicity for females:</b>	
None of the ingredients is listed.	
<b>- Chemicals known to cause reproductive toxicity for males:</b>	
None of the ingredients is listed.	
<b>- Chemicals known to cause developmental toxicity:</b>	
None of the ingredients is listed.	
<b>- Carcinogenic categories</b>	
<b>- EPA (Environmental Protection Agency)</b>	
None of the ingredients is listed.	
<b>- TLV (Threshold Limit Value established by ACGIH)</b>	
128-37-0	Antioxidant 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

- **Date of preparation / last revision** 05/01/2015 / 2

- **Abbreviations and acronyms:**

ADR: Accord européen sur le transport 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

ACGIH: American Conference of Governmental Industrial Hygienists

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)

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Flam. Liq. 4: Flammable liquids, Hazard Category 4

Acute Tox. 4: Acute toxicity, Hazard Category 4

Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2

Eye Irrit. 2A: Serious eye damage/eye irritation, Hazard Category 2A

Skin Sens. 1: Sensitisation - Skin, Hazard Category 1

STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3

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

- **Disclaimer**

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