

## 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:** PB420 All Purpose - Fast Set Time; High Strength - Part A
  - **Part number:** VTPB420A
- **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**



GHS02 Flame

Flam. Liq. 2 H225 Highly flammable liquid and vapor.



GHS07

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 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  
 methacrylic acid  
 Ethoxylated dimethacrylate

**- Hazard statements**

H225 Highly flammable liquid and vapor.  
 H315 Causes skin irritation.  
 H319 Causes serious eye 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.  
 P241 Use explosion-proof electrical/ventilating/lighting/equipment.  
 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.  
 P240 Ground/bond container and receiving equipment.

# Safety Data Sheet

acc. to OSHA HCS

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

(Contd. of page 1)

- P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.  
 P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.  
 Continue rinsing.  
 P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.  
 P405 Store locked up.  
 P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

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

80-62-6	methyl methacrylate	60-70%
	Impact modifying resin	10-20%
79-41-4	methacrylic acid	1-5%
	Ethoxylated dimethacrylate	1-5%
99-97-8	N,N-dimethyl-p-toluidine	1-5%

### 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. If symptoms persist, consult a doctor.**- After swallowing:** Immediately call a doctor.**- Information for doctor:**

- **Most important symptoms and effects, both acute and delayed** No further relevant information available.

- **Indication of any immediate medical attention and special treatment needed**

No further relevant information available.

### \* 5 Fire-fighting measures

**- Extinguishing media****- Suitable extinguishing agents:**

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 with full jet**- 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**

Wear protective equipment. Keep unprotected persons away.

Ensure adequate ventilation

Keep away from ignition sources

(Contd. on page 3)

## Safety Data Sheet

acc. to OSHA HCS

Printing date 05/01/2015

Reviewed on 05/01/2015

Trade name: Vibra-TITE® Methacrylate Adhesives

(Contd. of page 2)

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).

Dispose contaminated material as waste according to item 13.

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:** Store in a cool location.- **Information about storage in one common storage facility:** Not required.- **Further information about storage conditions:**

Keep receptacle tightly sealed.

Store in cool, dry conditions in well sealed receptacles.

- **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:****80-62-6 methyl methacrylate**PEL Long-term value: 410 mg/m<sup>3</sup>, 100 ppmREL Long-term value: 410 mg/m<sup>3</sup>, 100 ppmTLV Short-term value: 410 mg/m<sup>3</sup>, 100 ppmLong-term value: 205 mg/m<sup>3</sup>, 50 ppm

(SEN) NIC-DSEN

**79-41-4 methacrylic acid**REL Long-term value: 70 mg/m<sup>3</sup>, 20 ppm

Skin

TLV Long-term value: 70 mg/m<sup>3</sup>, 20 ppm**99-97-8 N,N-dimethyl-p-toluidine**

WEEL Long-term value: 0.5 ppm

- **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

(Contd. on page 4)

## Safety Data Sheet

acc. to OSHA HCS

Printing date 05/01/2015

Reviewed on 05/01/2015

Trade name: Vibra-TITE® Methacrylate Adhesives

(Contd. of page 3)

**- 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.

**- 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:**

10 °C (50 °F)

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

Not applicable.

**- Ignition temperature:**

430 °C (806 °F)

**- Decomposition temperature:**

Not determined.

**- Auto igniting:**

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 mm Hg)

**- 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):**

160000 mPas

**- Kinematic:**

Not determined.

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

0.1 %

**- VOC content:**

0.1 %

1.2 g/l / 0.01 lb/gal

**- Solids content:**

29.4 %

**- 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.

(Contd. on page 5)

## Safety Data Sheet

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(Contd. of page 4)

- **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:****80-62-6 methyl methacrylate**

Oral LD50 7872 mg/kg (rat)

**Impact modifying resin**

Oral LD50 10000 mg/kg (rat)

**79-41-4 methacrylic acid**

Oral LD50 1332 mg/kg (mouse)

Dermal LD50 500 mg/kg (rabbit)

**99-97-8 N,N-dimethyl-p-toluidine**

Oral LD50 100 mg/kg (ATE)

Dermal LD50 300 mg/kg (ATE)

Inhalative LC50/4 h 3 mg/l (ATE)

**- 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)**

80-62-6 methyl methacrylate

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.

(Contd. on page 6)

# Safety Data Sheet



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Trade name: Vibra-TITE® Methacrylate Adhesives

(Contd. of page 5)

*14 Transport information	
- <b>UN-Number</b> - DOT, IMDG, IATA	UN1133
- <b>UN proper shipping name</b> - DOT - IMDG, IATA	Adhesives ADHESIVES
- <b>Transport hazard class(es)</b> - DOT	
	
- <b>Class</b> - <b>Label</b>	3 Flammable liquids 3
- <b>IMDG, IATA</b>	
	
- <b>Class</b> - <b>Label</b>	3 Flammable liquids 3
- <b>Packing group</b> - DOT, IMDG, IATA	II
- <b>Environmental hazards:</b> - <b>Marine pollutant:</b>	No
- <b>Special precautions for user</b> - <b>Danger code (Kemler):</b> - <b>EMS Number:</b>	Warning: Flammable liquids 33 F-E,S-D
- <b>Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code</b>	Not applicable.
- <b>Transport/Additional information:</b> - DOT	
- <b>Quantity limitations</b>	On passenger aircraft/rail: 5 L On cargo aircraft only: 60 L
- <b>IMDG</b> - <b>Limited quantities (LQ)</b> - <b>Excepted quantities (EQ)</b>	5L Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml
- <b>UN "Model Regulation":</b>	UN1133, Adhesives, 3, III

15 Regulatory information	
- <b>Safety, health and environmental regulations/legislation specific for the substance or mixture</b>	
- <b>Sara</b>	
- <b>Section 355 (extremely hazardous substances):</b>	
None of the ingredients is listed.	
- <b>Section 313 (Specific toxic chemical listings):</b>	
80-62-6	methyl methacrylate
- <b>TSCA (Toxic Substances Control Act):</b>	
methyl methacrylate	
methacrylic acid	
N,N-dimethyl-p-toluidine	
Propylene glycol	
1,4-naphthoquinone	
Deionized water	

(Contd. on page 7)

## Safety Data Sheet

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(Contd. of page 6)

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

99-97-8 N,N-dimethyl-p-toluidine

**- Chemicals known to cause reproductive toxicity for females:**

None of the ingredients is listed.

**- Chemicals known to cause reproductive toxicity for males:**

None of the ingredients is listed.

**- Chemicals known to cause developmental toxicity:**

None of the ingredients is listed.

**- Carcinogenic categories****- EPA (Environmental Protection Agency)**

80-62-6 methyl methacrylate

E, NL

**- TLV (Threshold Limit Value established by ACGIH)**

80-62-6 methyl methacrylate

A4

**- NIOSH-Ca (National Institute for Occupational Safety and Health)**

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 Affaires

**- Contact:** Safety, Health and Environmental Affaires

**- 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)

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

Flam. Liq. 2: Flammable liquids, Hazard Category 2

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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