01/29/2024 Kit Components		
Product code Description		
VTPB310	Vibra-TITE® Methacrylate Adhesives PB310 All Purpose - For Difficult-To-Bond; High Strength	
Components:		
VTPB310A	Vibra-TITE® Methacrylate Adhesives	
VTPB310B	Vibra-TITE® Methacrylate Adhesives	





Page 1/9

Safety Data Sheet according to HPR, Schedule 1

Printing date 01/29/2024 Reviewed on 01/29/2024

1 Identification

- Product identifier
 - Trade name: Vibra-TITE® 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 identification

- Classification of the substance or mixture



Flammable Liquids - Category 2

H225 Highly flammable liquid and vapour.



GHS08 Health hazard

Carcinogenicity - Category 2

H351 Suspected of causing cancer.



. .

Skin Irritation - Category 2 Eye Irritation - Category 2A Skin Sensitizer - Category 1 H315 Causes skin irritation.

H319 Causes serious eye irritation.

H317 May cause an allergic skin reaction.

Specific Target Organ Toxicity - Single Exposure - Category 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 vapour.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H317 May cause an allergic skin reaction.

H351 Suspected of causing cancer.

Printing date 01/29/2024 Reviewed on 01/29/2024

Trade name: Vibra-TITE® Methacrylate Adhesives

(Contd. of page 1)

H335 May cause respiratory irritation.

 Precautionary s 	statements			
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.			
P233	Keep container tightly closed.			
P240	Ground and bond container and receiving equipment.			
P241	Use explosion-proof [electrical/ventilating/lighting] equipment.			
P242	Use non-sparking tools.			
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.			
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or 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.			
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.			

Dispose of contents/container in accordance with local/regional/national/international regulations.

3 Composition/Information on ingredients

- Chemical characterization: Mixtures

P501

- **Description:** Mixture of the substances listed below with nonhazardous additions.

- Dangerou	s components:	
CAS: 80-62-6	methyl methacrylate Flammable Liquids - Category 2, H225; Skin Irritation - Category 2, H315; Skin Sensitizer - Category 1, H317; Specific Target Organ Toxicity - Single Exposure - Category 3, H335	30 – 60% w/w
CAS: 110-16-7	2-Butenedioic acid (2Z) Acute Toxicity (Oral) - Category 4, H302; Acute Toxicity (Dermal) – Category 4, H312; Skin Irritation - Category 2, H315; Eye Irritation - Category 2A, H319; Skin Sensitizer - Category 1, H317; Specific Target Organ Toxicity - Single Exposure - Category 3, H335	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	1 – 5% w/w
	Monofunctional acid ester Acute Toxicity (Dermal) – Category 3, H311; Skin Corrosion - Category 1C, H314; Serious Eye Damage - Category 1, H318; Skin Sensitizer - Category 1, H317	0.5 – 1.5% w/v
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	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% w/w

4 First-aid measures

- Description of first aid measures

- After inhalation:

Supply fresh air and to be sure call for a doctor.

In case of unconsciousness place patient stably in side position for transportation.

Supply fresh air; consult doctor in case of complaints.

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

Printing date 01/29/2024 Reviewed on 01/29/2024

Trade name: Vibra-TITE® Methacrylate Adhesives

(Contd. of page 2)

- 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:

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:

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: 80-62-6 methyl methacrylate		
EL (Canada)	STEL: 100 ppm TWA: 50 ppm S(D)	
EV (Canada)	STEL: 100 ppm TWA: 50 ppm	
PEL (USA)	TWA: 410 mg/m³, 100 ppm	
REL (USA)	TWA: 410 mg/m³, 100 ppm	
TLV (USA)	STEL: 100 ppm TWA: 50 ppm DSEN, A4	

Printing date 01/29/2024 Reviewed on 01/29/2024

Trade name: Vibra-TITE® Methacrylate Adhesives

		(Contd. of page	
CAS: 128-37-) Butylated hydroxytoluene		
EL (Canada)	TWA: 2 mg/m³ vapour and inhalable aerosol		
EV (Canada)	TWA: 2 mg/m³ inhalable, vapour and aerosol		
REL (USA)	TWA: 10 mg/m³		
TLV (USA)	TWA: 2* mg/m³ *as inhalable fraction and vapor, A4		
CAS: 80-15-9	dimethylbenzyl hydroperoxide		
WEEL (USA)	.) TWA: 6 mg/m³, 1 ppm Skin		
CAS: 98-82-8	Cumene		
EL (Canada)	STEL: 75 ppm TWA: 25 ppm IARC 2B		
EV (Canada)	TWA: 245 mg/m³, 50 ppm Skin		
PEL (USA)	TWA: 245 mg/m³, 50 ppm Skin		
REL (USA)	TWA: 245 mg/m³, 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

- 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

Printing date 01/29/2024 Reviewed on 01/29/2024

Trade name: Vibra-TITE® Methacrylate Adhesives

(Contd. of page 4)

	(+
- Flash point:	10 °C
- Flammability (solid, gaseous):	Highly flammable.
- Auto igniting:	430 °C
- Decomposition temperature	Yot 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:	≤ 47 hPa
- Density at 20 °C:	~ 0.96 g/cm³
- Relative density	Not determined.
- Vapor density	Not determined.
 Evaporation rate 	Not determined.
- Solubility in / Miscibility with	
- Water:	Not miscible or difficult to mix.
- Partition coefficient (n-octanol/	water): Not determined.
- Viscosity:	
- Dynamic at 20 °C:	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:

- L	D/LC50 v	alues that are relevant for classification:
ATE (Acu	te Toxicity	r Estimate)
Oral	LD50	12,663 mg/kg (rat)
Dermal	LD50	13,220 mg/kg
Inhalative	LC50/4 h	26,190 mg/l (rat)
CAS: 80-6	62-6 methy	yl methacrylate
Oral	LD50	7,872 mg/kg (rat)
CAS: 110	-16-7 2-Bu	tenedioic acid (2Z)
Oral	LD50	708 mg/kg (rat)
Dermal	LD50	1,560 mg/kg (rabbit)
CAS: 128	-37-0 Buty	lated hydroxytoluene
Oral	LD50	890 mg/kg (rat)

Printing date 01/29/2024 Reviewed on 01/29/2024

Trade name: Vibra-TITE® Methacrylate Adhesives

		(Contd. of page 5
Monofund	ctional aci	d ester
Dermal	LD50	300 mg/kg (ATE)
CAS: 80-1	5-9 dimet	hylbenzyl hydroperoxide
Oral	LD50	382 mg/kg (rat)
Dermal	LD50	500 mg/kg (rat)
Inhalative	LC50/4 h	220 mg/l (rat)
CAS: 98-8	2-8 Cume	ne
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

- Carcinogenic categories

(International Agency for Research on Cancer)		
ethyl methacrylate	3	
tylated hydroxytoluene	3	
mene	2B	
- NTP (National Toxicology Program)		
mene	R	
I-naphthoquinone	R	
u u	c (International Agency for Research on Cancer) tethyl methacrylate utylated hydroxytoluene umene (National Toxicology Program) umene 4-naphthoquinone	

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.

Proposal mass so made descraing to emoid regulations.		
14 Transport information		
- UN-Number - DOT/TDG, ADR, IMDG, IATA	UN2924	
- UN proper shipping name - DOT/TDG	Flammable liquids, corrosive, n.o.s. (Methyl methacrylate monomer, stabilized, 2-Butenedioic acid (2Z))	
- ADR	UN2924 Flammable liquids, corrosive, n.o.s. (Methyl methacrylate monomer, stabilized, 2-Butenedioic acid (2Z))	

Printing date 01/29/2024 Reviewed on 01/29/2024

Trade name: Vibra-TITE® Methacrylate Adhesives

(Contd. of page 6)

- IMDG, IATA	FLAMMABLE LIQUID, CORROSIVE, N.O.S. (METHYL METHACRYLATE MONOMER, STABILIZED, 2-Butenedioic acid (2Z))
- Transport hazard class(es)	
- DOT/TDG (Transport dangerous goods):	
Annual day Control	
- Class - Label	3 Flammable liquids 3, 8
- ADR	
- Class - Label	3 Flammable liquids 3+8
- IMDG	
- Class - Label	3 Flammable liquids 3/8
- <i>IATA</i>	
- Class - Label	3 Flammable liquids 3 (8)
- Packing group - DOT/TDG, ADR, IMDG, IATA	II
- Environmental hazards: - Marine pollutant:	No
 Special precautions for user Hazard identification number (Kemler code): EMS Number: Segregation groups Stowage Category Stowage Code 	Warning: Flammable liquids 338 F-E,S-C (SGG1) Acids B SW2 Clear of living quarters.
Transport in bulk according to Annex II of MARPOL73/ and the IBC Code	
- Transport/Additional information:	тот арриовию.
- DOT/TDG - Quantity limitations	On passenger aircraft/rail: 1 L
ADD	On cargo aircraft only: 5 L
- ADR - Excepted quantities (EQ)	Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml
- IMDG	
- Limited quantities (LQ) - Excepted quantities (EQ)	1L Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml

Printing date 01/29/2024 Reviewed on 01/29/2024

Trade name: Vibra-TITE® Methacrylate Adhesives

(Contd. of page 7)

- 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

- Se	- Section 355 (extremely hazardous substances):	
None of the in	None of the ingredients is listed.	
- Se	ection 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	- TSCA (Toxic Substances Control Act):	
All component	All components have the value ACTIVE.	

- Canadian substance listings:
 - Canadian Domestic Substances List (DSL)

All ingredients are listed.

- Canadian Non-Domestic Substances List (NDSL)

None of the ingredients is listed.

- Canadian Ingredient Disclosure list (limit 0.1%)

None of the ingredients is listed.

- Canadian Ingredient Disclosure list (limit 1%)

CAS: 80-62-6 methyl methacrylate CAS: 110-16-7 2-Butenedioic acid (2Z)

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 Affaires
- Contact: Safety, Health and Environmental Affaires
- Classification System:
 - HMIS-ratings (scale 0 4)



*2 Health = *2 3 Fire = 3

REACTIVITY 0 Reactivity = 0

- NFPA ratings (scale 0 - 4)



- 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.

Printing date 01/29/2024 Reviewed on 01/29/2024

Trade name: Vibra-TITE® Methacrylate Adhesives

(Contd. of page 8)

- 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.





Page 1/7

Safety Data Sheet according to HPR, Schedule 1

Printing date 01/29/2024 Reviewed on 01/29/2024

1 Identification

- Product identifier
 - Trade name: Vibra-TITE® 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 identification

- Classification of the substance or mixture



Flammable Liquids - Category 2

H225 Highly flammable liquid and vapour.



Skin Irritation - Category 2

H315 Causes skin 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.

- Label elements
 - GHS label elements The product is classified and labeled according to the Globally Harmonized System (GHS).
 - Hazard pictograms





- Signal word Danger
- Hazard-determining components of labeling:

methyl methacrylate

- Hazard statements

H225 Highly flammable liquid and vapour.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H335 May cause respiratory irritation.

- Precautionary statements

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P233 Keep container tightly closed.

P240 Ground and bond container and receiving equipment.

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

P242 Use non-sparking tools.

P243 Take actions to prevent static discharges.

P264 Wash thoroughly after handling.

Use only outdoors or in a well-ventilated area. P271 P272 Contaminated work clothing should not be allowed out of the workplace.

(Contd. on page 2)

(Contd. of page 1)

Safety Data Sheet according to HPR, Schedule 1

Printing date 01/29/2024 Reviewed on 01/29/2024

Trade name: Vibra-TITE® Methacrylate Adhesives

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 [or 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.

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 - Category 2, H225; Skin Irritation - Category 2, H315; Skin Sensitizer - Category 1, H317; Specific Target Organ Toxicity - Single Exposure - Category 3, H335	60 – 80% w/w
CAS: 34562-31-7	3,5-diethyl-1,2-dihydro-1-phenyl-2-propylpyridine Acute Toxicity (Oral) - Category 4, H302; Acute Toxicity (Dermal) – Category 4, H312; Skin Irritation - Category 2, H315; Eye Irritation - Category 2B, H320	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

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: 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:

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.

Printing date 01/29/2024 Reviewed on 01/29/2024

Trade name: Vibra-TITE® Methacrylate Adhesives

(Contd. of page 2)

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:

The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit.

CAS: 80-62-6	CAS: 80-62-6 methyl methacrylate		
EL (Canada)	STEL: 100 ppm TWA: 50 ppm S(D)		
EV (Canada)	STEL: 100 ppm TWA: 50 ppm		
PEL (USA)	TWA: 410 mg/m³, 100 ppm		
REL (USA)	TWA: 410 mg/m³, 100 ppm		
TLV (USA)	STEL: 100 ppm TWA: 50 ppm DSEN, A4		
CAS: 128-37-	-0 Butylated hydroxytoluene		
EL (Canada)	TWA: 2 mg/m³ vapour and inhalable aerosol		
EV (Canada)	TWA: 2 mg/m³ inhalable, vapour and aerosol		
REL (USA)	TWA: 10 mg/m³		
TLV (USA)	TWA: 2* mg/m³ *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.

Printing date 01/29/2024 Reviewed on 01/29/2024

Trade name: Vibra-TITE® Methacrylate Adhesives

(Contd. of page 3)

Nitrile rubber, NBR

- Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

- Eye protection:



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: - Odor threshold:	Pungent		
	Not determined.		
- pH-value:	Not determined.		
- Change in condition			
 Melting point/Melting range: 	Undetermined.		
 Boiling point/Boiling range: 	≥ 101 °C		
- Flash point:	10 °C		
- Flammability (solid, gaseous):	Highly flammable.		
- Auto igniting:	430 °C		
- 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:	≤ 47 hPa		
- Density at 20 °C:	~ 1.25 g/cm³		
- Relative density	Not determined.		
- Vapor density	Not determined.		
- Evaporation rate	Not determined.		
- Solubility in / Miscibility with			
- Water:	Not miscible or difficult to mix.		
- Partition coefficient (n-octanol/wate	er): Not determined.		
- Viscosity:			
- Dynamic at 20 °C:	100,000 mPas		
- Kinematic:	Not determined.		
- Solvent content:			
- VOC content:	0.00 %		
-	0.0 g/l / 0.00 lb/gal		
- Solids content:	26.7 %		
- 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.

Printing date 01/29/2024 Reviewed on 01/29/2024

Trade name: Vibra-TITE® Methacrylate Adhesives

(Contd. of page 4)

- 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/LC	C50 values that are relevant for classification:
ATE (Ad	cute To	oxicity 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: 34	1562-3	1-7 3,5-diethyl-1,2-dihydro-1-phenyl-2-propylpyridine
Oral	LD50	500 mg/kg (ATE)
Dermal	LD50	1,100 mg/kg (ATE)
CAS: 12	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

	- IAF	RC (International Agency for Research on Cancer)	
	CAS: 80-62-6	methyl methacrylate	3
	CAS: 128-37-0	Butylated hydroxytoluene	3
Ī	- NTP (National Toxicology Program)		
	None of the ingredients is listed.		

12 Ecological information

- Toxicity
 - Aquatic toxicity: No further relevant information available.
- Persistence and degradability No further relevant information available.
- Behavior in environmental systems:
 - Bioaccumulative potential No further relevant information available.
 - Mobility in soil No further relevant information available.
- 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/TDG, ADR, IMDG, IATA

UN1133

- UN proper shipping name

- **DOT/TDG** Adhesives

Printing date 01/29/2024 Reviewed on 01/29/2024

Trade name: Vibra-TITE® Methacrylate Adhesives

(Contd. of page 5)

	(* 1 3 -)
- ADR - IMDG, IATA	UN1133 Adhesives ADHESIVES
- Transport hazard class(es)	
- DOT/TDG (Transport dangerous goods):	
T MATERIAL TO THE PARTY OF THE	
- Class - Label	3 Flammable liquids 3
- ADR, IMDG, IATA	
- Class - Label	3 Flammable liquids 3
- Packing group - DOT/TDG, ADR, IMDG, IATA	III
- Environmental hazards: - Marine pollutant:	No
 Special precautions for user Hazard identification number (Kemler code): EMS Number: Stowage Category 	Warning: Flammable liquids - F-E,S-D A
- Transport in bulk according to Annex II of MARPOL73/7 and the IBC Code	78 Not applicable.
- Transport/Additional information:	
- DOT/TDG - Quantity limitations	On passenger aircraft/rail: 60 L On cargo aircraft only: 220 L
- 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) - Excepted quantities (EQ)	5L Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
- UN "Model Regulation":	UN 1133 ADHESIVES, 3, III
45 Danislata majorta majorti a ra	

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	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 cor	mponents ha	ave the value ACTIVE.

- Canadian substance listings:

- Canadian Domestic Substances List (DSL)	
CAS: 80-62-6	methyl methacrylate

Printing date 01/29/2024 Reviewed on 01/29/2024

Trade name: Vibra-TITE® Methacrylate Adhesives

	(Contd. of page 6)	
	Impact modifying resin	
CAS: 34562-31-	7 3,5-diethyl-1,2-dihydro-1-phenyl-2-propylpyridine	
CAS: 128-37-0	Butylated hydroxytoluene	
	Wax	
	Polymerization inhibitor	
CAS: 13395-16-	9 copper(II) 4-oxopent-2-en-2-olate	
- Cai	nadian Non-Domestic Substances List (NDSL)	
None of the ingr	edients is listed.	
- Cai	- Canadian Ingredient Disclosure list (limit 0.1%)	
None of the ingr	None of the ingredients is listed.	
- Canadian Ingredient Disclosure list (limit 1%)		
CAS: 80-62-6	methyl methacrylate	
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 Affaires
- Contact: Safety, Health and Environmental Affaires
- Classification System:
 - HMIS-ratings (scale 0 4)



- NFPA ratings (scale 0 - 4)



Health = 1 Fire = 3 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

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.