05/03/2019 Kit Components	
Product code Description	
VTPB330 Vibra-TITE® Methacrylate Adhesives PB330 All Purpose - Medium Set Time; High Str	
Components:	
VTPB330A Vibra-TITE® Methacrylate Adhesives PB330 All Purp - Medium Set Time; High Strength - Part A	
VTPB330B	Vibra-TITE® Methacrylate Adhesives PB330 All Purpose - Medium Set Time: High Strength - Part B





Printing date 05/03/2019 Reviewed on 05/03/2019

1 Identification

- Product identifier

- Trade name: Vibra-TITE® Methacrylate Adhesives

- Synonyms: PB330 All Purpose - Medium Set Time; High Strength - Part A

- Part number: VTPB330A

- Application of the substance / the mixture Adhesives

- Details of the supplier of the safety data sheet

- Manufacturer/Supplier:

ND Industries, Inc 1000 North Crooks Road Clawson, MI 48017

USA

Telephone: +1-248-288-0000 Email: info@ndindustries.com Website: www.ndindustries.com

- Information department: Product Safety Department

- Emergency telephone number:

United States: 1-800-424-9300 International: +1-703-527-3887

2 Hazard(s) identification

- Classification of the substance or mixture



GHS02 Flame

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



GHS08 Health hazard

Resp. Sens. 1 H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Carc. 2 H351 Suspected of causing cancer.



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 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 maleic anhydride Monofunctional acid ester Rosin

- Hazard statements

H225 Highly flammable liquid and vapor.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

H317 May cause an allergic skin reaction.

H351 Suspected of causing cancer.

(Contd. of page 1)

Safety Data Sheet acc. to OSHA HCS

Printing date 05/03/2019 Reviewed on 05/03/2019

Trade name: Vibra-TITE® Methacrylate Adhesives

H335 May cause respiratory irritation.

- Precautionary statements

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

P233 Keep container tightly closed.

P240 Ground/bond container and receiving equipment.

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

Use only non-sparking tools. P242

P261 Avoid breathing dust/fume/gas/mist/vapors/spray P271 Use only outdoors or in a well-ventilated area.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P280 Wear protective gloves.

P280 Wear eye protection / face protection.

P284 [In case of inadequate ventilation] wear respiratory protection.

P303+P361+P353 If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

Continue rinsing.

P312 Call a poison center/doctor if you feel unwell.

P362+P364 Take off contaminated clothing and wash it before reuse. P333+P313 If skin irritation or rash occurs: Get medical advice/attention.

P321 Specific treatment (see on this label).

P403+P233 Store in a well-ventilated place. Keep container tightly closed.

P403+P235 Store in a well-ventilated place. Keep cool.

P405

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

- Classification system:

- NFPA ratings (scale 0 - 4)



Health = 2 Fire = 3 Reactivity = 0

- HMIS-ratings (scale 0 - 4)



*2 Health = *2 Fire = 3

- 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.

•	s components:	
CAS: 80-62-6	methyl methacrylate	70 – 79%
	Flam. Liq. 2, H225; Skin Irrit. 2, H315; Skin Sens. 1, H317; STOT SE 3, H335	
CAS: 128-37-0	Butylated hydroxytoluene	≤ 1%
	Acute Tox. 4, H302; Skin Irrit. 2, H315; Eye Irrit. 2A, H319; STOT SE 3, H336	
CAS: 108-31-6	maleic anhydride	≤ 1%
	Resp. Sens. 1, H334; Skin Corr. 1B, H314; Acute Tox. 4, H302; Skin Sens. 1, H317	
	Monofunctional acid ester	≤ 1%
	Acute Tox. 3, H311; Skin Corr. 1C, H314; Eye Dam. 1, H318; Skin Sens. 1, H317	
CAS: 8050-09-7	Rosin	≤ 1%
	Skin Sens. 1, H317	
CAS: 98-82-8	cumene	≤ 1%
	Flam. Liq. 3, H226; Carc. 2, H351; Asp. Tox. 1, H304; Acute Tox. 4, H302; STOT SE 3, H335	

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. Then consult a doctor.

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Trade name: Vibra-TITE® Methacrylate Adhesives

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- 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, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

CO2, 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:

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: 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:

The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit. At this time, the remaining constituent has no known exposure limits.

CAS: 80-62-6 methyl methacrylate

PEL | Long-term value: 410 mg/m³, 100 ppm

REL Long-term value: 410 mg/m³, 100 ppm

TLV Short-term value: 410 mg/m³, 100 ppm

Long-term value: 205 mg/m³, 50 ppm

DSĔN

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Trade name: Vibra-TITE® Methacrylate Adhesives

(Contd. of page 3) CAS: 128-37-0 Butylated hydroxytoluene REL Long-term value: 10 mg/m³ TLV Long-term value: 2* mg/m³ *as inhalable fraction and vapor CAS: 108-31-6 maleic anhydride PEL Long-term value: 1 mg/m³, 0.25 ppm REL Long-term value: 1 mg/m³, 0.25 ppm TLV Long-term value: 0.01* mg/m³, 0.0025* ppm DSEN, RSEN;*inhalable fraction + vapor CAS: 8050-09-7 Rosin TLV DSEN, RSEN, L CAS: 98-82-8 cumene PEL Long-term value: 245 mg/m³, 50 ppm REL Long-term value: 245 mg/m³, 50 ppm TLV Long-term value: (246) NIC-0.5 mg/m³, (50) NIC-0.1 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 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.

- 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
Odor threshold: Not determined.

- pH-value at 20 °C (68 °F): 5

- Change in condition

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

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(Contd. of page 4)

	(Contd. of page
 Boiling point/Boiling range: 	≥ 101 °C (≥ 213.8 °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 (≤ 35.3 mm Hg)
- Density at 20 °C (68 °F):	~ 0.97 g/cm³ (~ 8.09465 lbs/gal)
- 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/wa	ater): Not determined.
- Viscosity:	
- Dynamic at 20 °C (68 °F):	60,000 mPas
- Kinematic:	Not determined.
- Solvent content:	
 Organic solvents: 	0.3 %
- Water:	0.0 %
VOC content:	0.34 %
	~ 3.3 g/l / ~ 0.03 lb/gal
- Solids content:	27.9 %
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:

- LI	D/LC50 v	values that are relevant for classification:
ATE (Acut	te Toxicit	y Estimate)
Oral	LD50	89,000 mg/kg (rat)
Dermal	LD50	50,000 mg/kg
Inhalative	LC50/4 h	26,190 mg/l (rat)
CAS: 80-6	2-6 meth	yl methacrylate
Oral	LD50	7,872 mg/kg (rat)
CAS: 128-	-37-0 Buty	lated hydroxytoluene
Oral	LD50	890 mg/kg (rat)
CAS: 108-	-31-6 male	eic anhydride
Oral	LD50	400 mg/kg (rat)
Dermal	LD50	2,620 mg/kg (rabbit)

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Trade name: Vibra-TITE® Methacrylate Adhesives

| Monofunctional acid ester |
| Dermal | LD50 | 300 mg/kg (ATE) |
| 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: 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	C (International Agency for Research on Cancer)	
CAS: 80-62-6	methyl methacrylate	3
CAS: 9010-98-4	Neoprene rubber	3
CAS: 128-37-0	Butylated hydroxytoluene	3
CAS: 98-82-8	cumene	2
CAS: 14807-96-	6 Soapstone	3
- NT	P (National Toxicology Program)	
CAS: 98-82-8	cumene	
CAS: 130-15-4	1,4-naphthoquinone	
- os	HA-Ca (Occupational Safety & Health Administration)	
None of the ingr	edients is listed.	

12 Ecological information

- Toxicity
 - Aquatic toxicity: No further relevant information available.
- Persistence and degradability No further relevant information available.
- Behavior in environmental systems:
 - Bioaccumulative potential No further relevant information available.
 - **Mobility in soil** No further relevant information available.
- Additional ecological information:
 - General notes:

Water hazard class 1 (Self-assessment): slightly hazardous for water

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

- Results of PBT and vPvB assessment
 - PBT: Not applicable.
 - vPvB: Not applicable.
- Other adverse effects No further relevant information available.

13 Disposal considerations

- Waste treatment methods
 - Recommendation: Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
- Uncleaned packagings:
 - Recommendation: Disposal must be made according to official regulations.

14 Transport information

- UN-Number - DOT, IMDG, IATA	UN1133	
- UN proper shipping name - DOT - IMDG, IATA	Adhesives ADHESIVES	

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Trade name: Vibra-TITE® Methacrylate Adhesives

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- Transport hazard class(es) - DOT - Class 3 Flammable liquids - Label - IMDG, IATA - Class 3 Flammable liquids - Label - Packing group - DOŤ, ĬMDĠ, IATA П - Environmental hazards: - Marine pollutant: No - Special precautions for user Warning: Flammable liquids - Danger code (Kemler): 338 - EMS Number: F-E,S-D - Stowage Category В - Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code Not applicable. - Transport/Additional information: - DOT

- Quantity limitations

On passenger aircraft/rail: 1 L On cargo aircraft only: 5 L

- IMDG

- Limited quantities (LQ)

1L Code: E2

- Excepted quantities (EQ)

Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml

- UN "Model Regulation": UN 1133 ADHESIVES, 3, II

15 Regulatory information

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

- Se	ction 355 (extremely hazardous substances):	
None of the ing	redients is listed.	
- Se	ction 313 (Specific toxic chemical listings):	
CAS: 80-62-6	methyl methacrylate	
CAS: 80-15-9	dimethylbenzyl hydroperoxide	
CAS: 108-31-6	maleic anhydride	
	Monofunctional acid ester	
CAS: 98-82-8	cumene	
- TSCA	(Toxic Substances Control Act):	
methyl methacr	ylate	ACTIVE
Impact modifyin	Impact modifying resin ACTIVE	
Chlorosulfanate	Chlorosulfanated polyethylene ACTI	
Neoprene rubbe	Neoprene rubber AC	
Butylated hydro	Butylated hydroxytoluene ACTIV	
dimethylbenzyl	dimethylbenzyl hydroperoxide ACTIV	
maleic anhydrid	maleic anhydride ACTIVE	
Wax	Wax ACTIVE	

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*
ACTIVE

- Proposition 65

r reposition of			
- CI	- Chemicals known to cause cancer:		
	Impact modifying resin		
	Chlorosulfanated polyethylene		
CAS: 98-82-8	cumene		
- CI	- Chemicals known to cause reproductive toxicity for females:		
Impact modifyi	ng resin		
Monofunctiona	ıl acid ester		
- CI	hemicals known to cause reproductive toxicity for males:		
Impact modifyi	ng resin		
Monofunctiona	Monofunctional acid ester		
- CI	hemicals known to cause developmental toxicity:		
Monofunctiona	Monofunctional acid ester		

- Carcinogenic categories

- EPA	(Environmental Protection Agency)	
CAS: 80-62-6 me	hyl methacrylate	E, NL
CAS: 98-82-8 cur	nene	D, CBE
- TLV	Threshold Limit Value established by ACGIH)	
CAS: 80-62-6	methyl methacrylate	A
CAS: 128-37-0	Butylated hydroxytoluene	A
CAS: 108-31-6	maleic anhydride	A
CAS: 14807-96-6	Soapstone	A
- NIOS	H-Ca (National Institute for Occupational Safety and Health	1)
None of the ingred	ients 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 05/03/2019 / 23
 - 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

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Trade name: Vibra-TITE® Methacrylate Adhesives

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vPvB: very Persistent and very Bioaccumulative
NIOSH: National Institute for Occupational Safety
OSHA: Occupational Safety & Health
TLV: Threshold Limit Value
PEL: Permissible Exposure Limit
REL: Recommended Exposure Limit
Flam. Liq. 2: Flammable liquids – Category 2
Flam. Liq. 3: Flammable liquids – Category 3
Acute Tox. 4: Acute toxicity – Category 4
Acute Tox. 3: Acute toxicity – Category 4
Acute Tox. 10: Skin corrosion/irritation – Category 1B
Skin Corr. 10: Skin corrosion/irritation – Category 1C
Skin Irrit. 2: Skin corrosion/irritation – Category 1C
Skin Irrit. 2: Skin corrosion/irritation – Category 2
Eye Dam. 1: Serious eye damage/eye irritation – Category 1
Eye Irrit. 2:A: Serious eye damage/eye irritation – Category 1
Skin Sens. 1: Respiratory sensitisation – Category 1
Skin Sens. 1: Skin sensitisation – Category 2
STOT SE 3: Specific target organ toxicity (single exposure) – Category 3
Asp. Tox. 1: Aspiration hazard – Category 1

- * Data compared to the previous version altered.

- Disclaimer

The information set forth is based on information that ND Industries, Incorporated believes to be accurate. No warranty, expressed or implied, is intended. The information is provided solely for your information and consideration and ND Industries Inc. assumes no legal responsibility for use or reliance thereon. In the event of a discrepancy between the information on the non-English document and its English counterpart, the English version shall supersede.

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Printing date 05/03/2019 Reviewed on 05/03/2019

1 Identification

- Product identifier

- Trade name: Vibra-TITE® Methacrylate Adhesives

- Synonyms: PB330 All Purpose - Medium Set Time; High Strength - Part B

- Part number: VTPB330B

- Application of the substance / the mixture Adhesives

- Details of the supplier of the safety data sheet

- Manufacturer/Supplier:

ND Industries, Inc 1000 North Crooks Road Clawson, MI 48017

USA

Telephone: +1-248-288-0000 Email: info@ndindustries.com Website: www.ndindustries.com

- Information department: Product Safety Department

- Emergency telephone number:

United States: 1-800-424-9300 International: +1-703-527-3887

2 Hazard(s) identification

- Classification of the substance or mixture



GHS02 Flame

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



Skin Irrit. 2 H315 Causes skin 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

- Hazard statements

H225 Highly flammable liquid and vapor.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H335 May cause respiratory irritation.

- Precautionary statements

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

P233 Keep container tightly closed.

P240 Ground/bond container and receiving equipment.

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

P242 Use only non-sparking tools.

P243 Take precautionary measures against static discharge.
P261 Avoid breathing dust/fume/gas/mist/vapors/spray
P271 Use only outdoors or in a well-ventilated area.

P272 Contaminated work clothing must not be allowed out of the workplace.
P280 Wear protective gloves/protective clothing/eye protection/face protection.

P280 Wear protective gloves.

P303+P361+P353 If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

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Trade name: Vibra-TITE® Methacrylate Adhesives

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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.

Store in a well-ventilated place. Keep cool. P403+P235

P405 Store locked up.

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

- Classification system:

P501

- NFPA ratings (scale 0 - 4)



Health = 1 Fire = 3 Reactivity = 0

- HMIS-ratings (scale 0 - 4)



1 Health = 1 Fire = 3

- 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	- Dangerous components:	
CAS: 80-62-6	methyl methacrylate	70 – 79%
	Flam. Liq. 2, H225; Skin Irrit. 2, H315; Skin Sens. 1, H317; STOT SE 3, H335	
CAS: 34562-31-7	3,5-diethyl-1,2-dihydro-1-phenyl-2-propylpyridine	1 – 4%
	Acute Tox. 4, H302; Acute Tox. 4, H312; Skin Irrit. 2, H315; Eye Irrit. 2B, H320	
CAS: 128-37-0	Butylated hydroxytoluene	≤ 1%
	Acute Tox. 4, H302; Skin Irrit. 2, H315; Eye Irrit. 2A, H319; STOT SE 3, H336	

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

CO2, 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:

Wear self-contained respiratory protective device.

Wear fully protective suit.

Printing date 05/03/2019 Reviewed on 05/03/2019

Trade name: Vibra-TITE® Methacrylate Adhesives

(Contd. of page 2)

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: 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:

The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit. At this time, the remaining constituent has no known exposure limits.

CAS	: 80-62-6 methyl methacrylate
PEL	Long-term value: 410 mg/m³, 100 ppm
REL	Long-term value: 410 mg/m³, 100 ppm
TLV	Short-term value: 410 mg/m³, 100 ppm Long-term value: 205 mg/m³, 50 ppm DSEN
CAS	: 128-37-0 Butylated hydroxytoluene
REL	Long-term value: 10 mg/m³
TLV	Long-term value: 2* mg/m³ *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.

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Safety Data Sheet acc. to OSHA HCS

Printing date 05/03/2019 Reviewed on 05/03/2019

Trade name: Vibra-TITE® Methacrylate Adhesives

- 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.

- 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		
- Odor threshold:	Not determined.		
- pH-value:	Not determined.		
 Change in condition Melting point/Melting range: Boiling point/Boiling range: 	Undetermined. 101 °C (213.8 °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 (35.3 mm Hg)		
- Density at 20 °C (68 °F):	1.25 g/cm³ (10.43125 lbs/gal)		
- 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	- Partition coefficient (n-octanol/water): Not determined.		
- Viscosity:			
- Dynamic at 20 °C (68 °F):	100,000 mPas		
- Kinematic:	Not determined.		
- Solvent content:			
- VOC content:	0.00 %		
	0.0 g/l / 0.00 lb/gal		

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Trade name: Vibra-TITE® Methacrylate Adhesives

(Contd. of page 4)

- 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.
- Incompatible materials: No further relevant information available.
- Hazardous decomposition products: No dangerous decomposition products known.

11 Toxicological information

- Information on toxicological effects
 - Acute toxicity:

-	LD/LC50 values that are relevant for classification:	
ATE (A	cute Toxicity Estimate)	
Oral	LD50 16,330 mg/kg	
Dermal	LD50 44,000 mg/kg	
CAS: 8	0-62-6 methyl methacrylate	
Oral	LD50 7,872 mg/kg (rat)	
CAS: 3	4562-31-7 3,5-diethyl-1,2-dihydro-1-phenyl-2-propylpyridine	
Oral	LD50 500 mg/kg (ATE)	
Dermal	LD50 1,100 mg/kg (ATE)	
CAS: 1	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 eve: 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

- <i>IA</i>	RC (International Agency for Research on Cancer)		
CAS: 80-62-6	methyl methacrylate	3	
CAS: 128-37-0	Butylated hydroxytoluene	3	
- N	TP (National Toxicology Program)		
None of the in	gredients is listed.		
- O.	- 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.

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Trade name: Vibra-TITE® Methacrylate Adhesives

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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:

 Oncleaned packagings: Recommendation: Disposal must be made according. 	ding to official regulations.
14 Transport information	
- UN-Number - DOT, IMDG, IATA	UN1133
- UN proper shipping name - DOT - IMDG, IATA	Adhesives ADHESIVES
- Transport hazard class(es)	
- DOT	
- Class	3 Flammable liquids
- Label	3
- IMDG, IATA	
- Class - Label	3 Flammable liquids 3
- Packing group - DOT, IMDG, IATA	II
- Environmental hazards: - Marine pollutant:	No
- Special precautions for user	Warning: Flammable liquids
- Danger code (Kemler): - EMS Number:	- F-E,S-D
- Stowage Category	A A
- Transport in bulk according to Annex II of MAR and the IBC Code	RPOL73/78 Not applicable.
- Transport/Additional information:	
- DOT - Quantity limitations	On passenger aircraft/rail: 60 L On cargo aircraft only: 220 L
- 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, II

15 Regulatory information

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

- Sec	tion 355 (extremely haza	ardous substances):	
None of the ingr	edients is listed.		
- Sec	tion 313 (Specific toxic	chemical listings):	
CAS: 80-62-6	methyl methacrylate		
	·	(C	contd. on page 7)

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Trade name: Vibra-TITE® Methacrylate Adhesives

(Contd. of page 6) CAS: 13395-16-9 copper(II) 4-oxopent-2-en-2-olate - TSCA (Toxic Substances Control Act): All components have the value ACTIVE. Hazardous Air Pollutants CAS: 80-62-6 methyl methacrylate

- Proposition 65

- Chemicals known to cause cancer:

Impact modifying resin

Chemicals known to cause reproductive toxicity for females:

Impact modifying resin

- Chemicals known to cause reproductive toxicity for males:

Impact modifying resin

- Chemicals known to cause developmental toxicity:

None of the ingredients is listed.

Carcinogenic categories

- EPA (Environmental Protection Agency)		
CAS: 80-62-6 methyl methacrylate	E, NL	
- TLV (Threshold Limit Value established by ACGIH)		
CAS: 80-62-6 methyl methacrylate	A4	
CAS: 128-37-0 Butylated hydroxytoluene	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 05/03/2019 / 14
 - 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 NIOSH: National Institute for Occupational Safety OSHA: Occupational Safety & Health

TLV: Threshold Limit Value

PEL: Permissible Exposure Limit REL: Recommended Exposure Limit

Flam. Liq. 2: Flammable liquids - Category 2
Acute Tox. 4: Acute toxicity - Category 2
Skin Irnit. 2: Skin corrosion/irritation - Category 2
Eye Irrit. 2A: Serious eye damage/eye irritation - Category 2A

Eye Irrit. 2B: Serious eye damage/eye irritation – Category 2B Skin Sens. 1: Skin sensitisation – Category 1

STOT SE 3: Specific target organ toxicity (single exposure) - Category 3

- * Data compared to the previous version altered.

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