



Safety Data Sheet

according to HPR, Schedule 1

Printing date 01/29/2024

1 Identification

Reviewed on 01/26/2024

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- Product identifier - Trade name: Vibra-TITE® Methacrylate Adhesives - Synonyms: PB550 Marine - U.V. Stable - White Part A - Part number: VTPB550A - 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

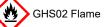
Clawson, MI 48017 USA Telephone: +1-248-288-0000 Email: info@ndindustries.com Website: www.ndindustries.com

- 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.

H318 Causes serious eye damage.

GHS05 Corrosion

Serious Eye Damage - Category 1

GHS07

Skin Irritation - Category 2H315 Causes skin irritation.Skin Sensitizer - Category 1H317 May cause an allergic skin reaction.Specific Target Organ Toxicity - Single Exposure - Category 3H335 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 Methacrylic acid 2-(2-methylprop-2-enoyloxy)ethyl 2-methylprop-2-enoate Monofunctional acid ester

- Hazard statements

H225 Highly flammable liquid and vapour.

H315 Causes skin irritation.

H318 Causes serious eye damage.

H317 May cause an allergic skin reaction.

H335 May cause respiratory irritation.

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according to HPR, Schedule 1

Trade name: Vibra-TITE® Methacrylate Adhesives

	(Contd. of page 1)
- 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.
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+P35	3 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+P33	8 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to
	do. Continue rinsing.
P310	Immediately call a poison center/doctor.
P321	Specific treatment (see on this label).
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.
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:
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CAS: 80-62-6	methyl methacrylate	45 – 70% w/w
	Flammable Liquids - Category 2, H225; Skin Irritation - Category 2, H315; Skin Sensitizer - Category 1, H317; Specific Target Organ Toxicity - Single Exposure - Category 3, H335	
CAS: 79-41-4	Methacrylic acid	1 – 5% w/w
	Acute Toxicity (Dermal) – Category 3, H311; Skin Corrosion - Category 1A, H314; Serious Eye Damage - Category 1, H318; Acute Toxicity (Oral) - Category 4, H302; Acute Toxicity (Inhalation) - Category 4, H332; Specific Target Organ Toxicity - Single Exposure - Category 3, H335; Flammable Liquids - Category 4, H227	
CAS: 25852-47-5	2-(2-methylprop-2-enoyloxy)ethyl 2-methylprop-2-enoate Skin Irritation - Category 2, H315; Eye Irritation - Category 2A, H319; Specific Target Organ Toxicity - Single Exposure - Category 3, H335	1 – 5% w/w
	Tinuvin 400	0.1 – 1% w/w
	Flammable Liquids - Category 3, H226; Specific Target Organ Toxicity - Single Exposure - Category 3, H336	
	Monofunctional acid ester	0.1 – 1% w/w
	Acute Toxicity (Dermal) – Category 3, H311; Skin Corrosion - Category 1C, H314; Serious Eye Damage - Category 1, H318; Skin Sensitizer - Category 1, H317	

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.
 - 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.

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- 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

0A0.00-02-0	OAO. 00-02-0 methyl methaci ylate	
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: 79-41-4	Methacrylic acid	
EL (Canada)	TWA: 20 ppm	
EV (Canada)	TWA: 70 mg/m³, 20 ppm	
REL (USA)	TWA: 70 mg/m³, 20 ppm Skin	
TLV (USA)	TWA: 20 ppm	
A -1-12	tional informations. The lists that successful desires the successful successful as herein	

- Additional information: The lists that were valid during the creation were used as basis.

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	(Contd. of page
- Exposure controls	
 Personal protective equipment: General protective and hygienic Keep away from foodstuffs, beverages 	
Immediately remove all soiled and cor Wash hands before breaks and at the	ntaminated clothing.
Avoid contact with the eyes and skin. - Breathing equipment:	
protective device that is independent of Protection of hands:	ion use respiratory filter device. In case of intensive or longer exposure use respiratory of circulating air.
Protective gloves	
Selection of the glove material on con- - <i>Material of gloves</i>	eable and resistant to the product/ the substance/ the preparation. Isideration of the penetration times, rates of diffusion and the degradation
manufacturer to manufacturer. As not be calculated in advance and l	es does not only depend on the material, but also on further marks of quality and varies from the product is a preparation of several substances, the resistance of the glove material c has therefore to be checked prior to the application.
Nitrile rubber, NBR - Penetration time of glove ma The exact break through time bas	aterial to be found out by the manufacturer of the protective gloves and has to be observed.
- Body protection: Protective work of	clothing
Physical and chemical properties	
Information on basic physical and che - General Information	emical properties
- Appearance:	
- Form:	Viscous
- Color: - Odor:	White Pungent
- Odor threshold:	Not determined.
- pH-value:	Not determined.
- Change in condition - Melting point/Melting range: - Boiling point/Boiling range:	Undetermined. ≥ 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: - Upper:	2.1 Vol % 12.5 Vol %
- Vapor pressure at 20 °C:	≤ 47 hPa
- Density at 20 °C:	~ 0.96 g/cm³
- Relative density	Not determined.
- Vapor density - Evaporation rate	Not determined. Not determined.
•	Not determined.
 Solubility in / Miscibility with Water: 	Not miscible or difficult to mix.
- Partition coefficient (n-octanol/wat	
- Viscosity: - Dynamic at 20 °C:	160,000 mPas
Dynamic at 20°C.	100,000 HIF ad

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		(Contd. of page 4)
- Kinematic:	Not determined.	
- Solvent content:		
- VOC content:	0.00 %	
	0.0 g/l / 0.00 lb/gal	
- Solids content:	16.7 %	
- 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:

- Acute toxicity:		
- LI	D/LC50 v	alues that are relevant for classification:
ATE (Acut	e Toxicity	r Estimate)
Oral	LD50	44,400 mg/kg (mouse)
Dermal	LD50	15,000 mg/kg
Inhalative	LC50/4 h	367 mg/l
CAS: 80-6	CAS: 80-62-6 methyl methacrylate	
Oral	LD50	7,872 mg/kg (rat)
CAS: 79-4	1-4 Metha	icrylic acid
Oral	LD50	1,332 mg/kg (mouse)
Dermal	LD50	500 mg/kg (rabbit)
Inhalative	LC50/4 h	11 mg/l (ATE)
Monofunctional acid ester		
Dermal	LD50	300 mg/kg (ATE)
- D	imany in	vitant offoct:

- 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

 IARC (International Agency for Research on Cancer) 	
CAS: 80-62-6 methyl methacrylate	3
- 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.

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Other advarge offects Ne further relevant information available	in the second
Other adverse effects No further relevant information avail Disposal considerations	
Waste treatment methods - Recommendation: Must not be disposed of together w	vith household garbage. Do not allow product to reach sewage system.
Uncleaned packagings: - Recommendation: Disposal must be made according	to official regulations.
Transport information	
UN-Number - DOT/TDG, ADR, IMDG, IATA	UN1133
UN proper shipping name - DOT/TDG - ADR - IMDG, IATA	Adhesives UN1133 Adhesives ADHESIVES
Transport hazard class(es)	
- DOT/TDG (Transport dangerous goods):	
- 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: - Segregation groups - Stowage Category	Warning: Flammable liquids - F-E,S-D (SGG1) Acids A
Transport in bulk according to Annex II of MARPOL and the IBC Code	.73/78 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

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15 Regulatory information

- Safety, health and environmental regulations/legislation specific for the substance or mixture No further relevant information available.

- Sara		
- Se	ection 355 (extremely hazardous substances):	
None of the in	gredients is listed.	
- Se	ection 313 (Specific toxic chemical listings):	
CAS: 80-62-6	methyl methacrylate	
	Monofunctional acid ester	
- TSCA	(Toxic Substances Control Act):	
methyl methad	crylate	ACTIVE
Butyl acrylate-	Butyl acrylate-methyl methacrylate polymer	
Methacrylic ac	id	ACTIVE
2-(2-methylpro	p-2-enoyloxy)ethyl 2-methylprop-2-enoate	ACTIVE
Wax		ACTIVE
Amorphous Si	lica	ACTIVE
calcium carbo	nate	ACTIVE
MHPT		ACTIVE
Monofunctiona	al acid ester	ACTIVE
Polymerizatior	n inhibitor	ACTIVE
Catalyst		ACTIVE
•	-lieu	

- Canadian substance listings:

- Cana	- Canadian Domestic Substances List (DSL)	
CAS: 80-62-6	methyl methacrylate	
CAS: 25852-37-3	Butyl acrylate-methyl methacrylate polymer	
CAS: 79-41-4	Methacrylic acid	
CAS: 25852-47-5	2-(2-methylprop-2-enoyloxy)ethyl 2-methylprop-2-enoate	
	Wax	
CAS: 67762-90-7	Amorphous Silica	
CAS: 471-34-1	calcium carbonate	
CAS: 2842-44-6	MHPT	
	Monofunctional acid ester	
	Polymerization inhibitor	
CAS: 102-54-5	Catalyst	
- Cana	dian Non-Domestic Substances List (NDSL)	
None of the ingree	dients is listed.	
- Cana	- Canadian Ingredient Disclosure list (limit 0.1%)	
None of the ingree	None of the ingredients is listed.	
- Cana	- Canadian Ingredient Disclosure list (limit 1%)	
CAS: 80-62-6 methyl methacrylate		
CAS: 79-41-4 Methacrylic acid		

- 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)



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- 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) LCS0: Lethal concentration, 50 percent

D50: Lethal dose, 50 percent PBT: Persistent, Bioaccumulative and Toxic vPvB: very Persistent and very Bioaccumulative

- * Data compared to the previous version altered.

- Disclaimer

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