

Safety Data Sheet
acc. to OSHA HCS

Printing date 01/23/2024

Reviewed on 09/20/2023

1 Identification

- Product identifier

- **Trade name:** Vibra-TITE® Urethanes
- **Synonyms:** 989 Polyurethane
- **Part number:** VT989
- **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



GHS08 Health hazard

Sensitization - Respiratory 1	H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
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GHS07

Skin Irritation 2	H315	Causes skin irritation.
Eye Irritation 2A	H319	Causes serious eye irritation.
Sensitization - Skin 1	H317	May cause an allergic skin reaction.
Specific Target Organ Toxicity - Single Exposure 3	H335-H336	May cause respiratory irritation. May cause drowsiness or dizziness.

- Label elements

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



GHS07 GHS08

- **Signal word** Danger

- Hazard-determining components of labeling:

methylenediphenyl diisocyanate

- Hazard statements

- 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.
- H335-H336 May cause respiratory irritation. May cause drowsiness or dizziness.

- Precautionary statements

- P261 Avoid breathing dust/fume/gas/mist/vapors/spray
- P264 Wash thoroughly after handling.
- 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.
- P280 Wear eye protection / face protection.

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P284	[In case of inadequate ventilation] wear respiratory protection.
P302+P352	If on skin: Wash with plenty of water.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P304+P341	If inhaled: If breathing is difficult, 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.
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).
P337+P313	If eye irritation persists: Get medical advice/attention.
P342+P311	If experiencing respiratory symptoms: Call a poison center/doctor.
P363	Wash contaminated clothing before reuse.
P403+P233	Store in a well-ventilated place. Keep container tightly closed.
P405	Store locked up.
P501	Dispose of contents/container in accordance with local/regional/national/international regulations.

- Other hazards**- Results of PBT and vPvB assessment**

- **PBT:** Not applicable.
- **vPvB:** Not applicable.

* 3 Composition/information on ingredients

- Chemical characterization: Mixtures

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

- Dangerous components:

CAS: 26447-40-5	methylenediphenyl diisocyanate	1 – 4%
	Sensitization - Respiratory 1, H334; Carcinogenicity 2, H351; Specific Target Organ Toxicity - Repeated Exposure 2, H373; Acute Toxicity - Inhalation 4, H332; Skin Irritation 2, H315; Eye Irritation 2A, H319; Sensitization - Skin 1, H317; Specific Target Organ Toxicity - Single Exposure 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.**- 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:** Use fire fighting measures that suit the environment.

- 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

Ensure adequate ventilation
Wear protective clothing.

- Environmental precautions: Do not allow to enter sewers/ surface or ground water.**- Methods and material for containment and cleaning up:**

Dispose contaminated material as waste according to section 13.
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.

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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 dust.

- **Information about protection against explosions and fires:** No special measures required.

- 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:** None.

- **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 product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

- **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.

- 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.

- **Eye protection:** Required use of safety glasses

- **Body protection:** Protective work clothing

* 9 Physical and chemical properties

- Information on basic physical and chemical properties

- General Information

- Appearance:

- Form:

Liquid

- Color:

Amber colored

- Odor:

Characteristic

- Odor threshold:

Not determined.

- pH-value:

Not applicable.

- Change in condition

- Melting point/Melting range:

Undetermined.

- Boiling point/Boiling range:

Undetermined.

- Flash point:

200 °C (392 °F)

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- Flammability (solid, gaseous):	Not determined.
- Decomposition temperature:	Not determined.
- Ignition temperature:	Product is not selfigniting.
- Danger of explosion:	Product does not present an explosion hazard.
- Explosion limits:	
- Lower:	Not determined.
- Upper:	Not determined.
- Vapor pressure:	Not applicable.
- Density at 20 °C (68 °F):	~ 1.1 g/cm ³ (~ 9.1795 lbs/gal)
- Relative density	Not determined.
- Vapor density	Not applicable.
- Evaporation rate	Not applicable.
- Solubility in / Miscibility with	
- Water:	Insoluble.
- Partition coefficient (n-octanol/water):	Not determined.
- Viscosity:	
- Dynamic at 20 °C (68 °F):	7,000 mPas
- Kinematic:	Not applicable.
- Solvent content:	
- VOC content:	0.00 %
- Solids content:	96.0 %
- 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 (Acute Toxicity Estimate)

Inhalative	LC50/4 h	37.5 mg/l
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CAS: 26447-40-5 methylenediphenyl diisocyanate

Inhalative	LC50/4 h	1.5 mg/l (ATE)
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- **Primary irritant effect:**

- **on the skin:** No irritant effect.
- **on the eye:** No irritating effect.

- **Sensitization:**

Sensitization possible through inhalation.
Sensitization possible through skin contact.

- **Additional toxicological information:**

The product shows the following dangers according to internally approved calculation methods for preparations:
Harmful
Irritant

- **Carcinogenic categories**

- **IARC (International Agency for Research on Cancer)**

None of the ingredients is listed.

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- NTP (National Toxicology Program)

None of the ingredients is listed.

- OSHA-Ca (Occupational Safety & Health Administration)

None of the ingredients is listed.

12 Ecological information
- Toxicity
- Aquatic toxicity: No further relevant information available.

- Persistence and degradability No further relevant information available.

- Behavior in environmental systems:
- Bioaccumulative potential No further relevant information available.

- Mobility in soil No further relevant information available.

- 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, ADN, IMDG, IATA not regulated

- UN proper shipping name
- DOT, ADN, IMDG, IATA not regulated

- Transport hazard class(es)
- DOT, ADN, IMDG, IATA
- Class not regulated

- Packing group
- DOT, IMDG, IATA not regulated

- Environmental hazards:
- Marine pollutant: No

- Special precautions for user

Not applicable.

- Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Not applicable.

- UN "Model Regulation":

not regulated

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 of the ingredients is listed.

- Section 313 (Specific toxic chemical listings):

None of the ingredients is listed.

- TSCA (Toxic Substances Control Act):

All components have the value ACTIVE.

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- Hazardous Air Pollutants
None of the ingredients is listed.
- Proposition 65
- Chemicals known to cause cancer:
None of the ingredients is listed.
- Chemicals known to cause reproductive toxicity for females:
None of the ingredients is listed.
- Chemicals known to cause reproductive toxicity for males:
None of the ingredients is listed.
- Chemicals known to cause developmental toxicity:
None of the ingredients is listed.
- Carcinogenic categories
- EPA (Environmental Protection Agency)
None of the ingredients is listed.
- TLV (Threshold Limit Value)
None of the ingredients is listed.
- 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 Affairs
- **Contact:** Safety, Health and Environmental Affairs
- **Classification System:**

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

HEALTH	2	Health = *2
FIRE	1	Fire = 1
REACTIVITY	0	Reactivity = 0

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

2	1	0	Health = 2
			Fire = 1
			Reactivity = 0

- **Date of preparation / last revision** 01/23/2024

- **Abbreviations and acronyms:**

ADR: Accord relatif au transport international 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
 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
 NIOSH: National Institute for Occupational Safety
 OSHA: Occupational Safety & Health
 TLV: Threshold Limit Value
 PEL: Permissible Exposure Limit
 REL: Recommended Exposure Limit
 Acute Toxicity - Inhalation 4: Acute toxicity – Category 4
 Skin Irritation 2: Skin corrosion/irritation – Category 2
 Eye Irritation 2A: Serious eye damage/eye irritation – Category 2A
 Sensitization - Respiratory 1: Respiratory sensitisation – Category 1
 Sensitization - Skin 1: Skin sensitisation – Category 1
 Carcinogenicity 2: Carcinogenicity – Category 2
 Specific Target Organ Toxicity - Single Exposure 3: Specific target organ toxicity (single exposure) – Category 3
 Specific Target Organ Toxicity - Repeated Exposure 2: Specific target organ toxicity (repeated exposure) – Category 2

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

- **Disclaimer**

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