

Kit Components

| Product code | Description |
|--------------|---|
| VT933 | Vibra-TITE® Epoxy 933 Impregnating and Encapsulating Epoxy |

Components:

| | |
|--------|---|
| VT933A | Vibra-TITE® Epoxy 933 Impregnating and Encapsulating Epoxy - Part A |
| VT933B | Vibra-TITE® Epoxy 933 Impregnating and Encapsulating Epoxy - Part B |

Safety Data Sheet
acc. to OSHA HCS

Printing date 04/30/2019

Reviewed on 04/30/2019

1 Identification

- Product identifier

- **Trade name:** Vibra-TITE® Epoxy

- **Synonyms:** 933 Impregnating and Encapsulating Epoxy - Part A

- **Part number:** VT933A

- **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



Skin Irrit. 2 H315 Causes skin irritation.

Eye Irrit. 2A H319 Causes serious eye irritation.

Skin Sens. 1 H317 May cause an allergic skin reaction.

STOT SE 3 H335 May cause respiratory irritation.

- Label elements

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

- Hazard pictograms



- **Signal word** Warning

- Hazard-determining components of labeling:

Bisphenol-A epoxy resin

Epoxy Resin

- Hazard statements

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H317 May cause an allergic skin reaction.

H335 May cause respiratory irritation.

- Precautionary statements

P261 Avoid breathing dust/fume/gas/mist/vapors/spray

P264 Wash face, hands and any exposed skin 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.

P302+P352 If on skin: Wash with plenty of water.

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.

P332+P313 If skin irritation occurs: Get medical advice/attention.

P333+P313 If skin irritation or rash occurs: Get medical advice/attention.

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| | |
|-----------|---|
| P321 | Specific treatment (see on this label). |
| P337+P313 | If eye irritation persists: Get medical advice/attention. |
| 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. |

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

| | | |
|---|---|---|
| 2 | 1 | 0 |
|---|---|---|

| |
|----------------|
| Health = 2 |
| Fire = 1 |
| Reactivity = 0 |

- HMIS-ratings (scale 0 - 4)

| | | |
|------------|---|----------------|
| HEALTH | 2 | Health = 2 |
| FIRE | 1 | Fire = 1 |
| REACTIVITY | 0 | Reactivity = 0 |

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

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

3 Composition/information on ingredients

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

- Dangerous components:

| | | | |
|-----------------|-------------------------|---|--------|
| CAS: 25068-38-6 | Bisphenol-A epoxy resin | Skin Irrit. 2, H315; Eye Irrit. 2A, H319; Skin Sens. 1, H317; STOT SE 3, H335 | 39.4% |
| CAS: 14228-73-0 | Epoxy Resin | Skin Irrit. 2, H315; Skin Sens. 1B, H317; Eye Irrit. 2B, H320 | 5 – 9% |

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, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
CO₂, sand, extinguishing powder. Do not use water.
Use fire fighting measures that suit the environment.

- **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
Wear protective clothing.

- Environmental precautions:

Inform respective authorities in case of seepage into water course or sewage system.
Do not allow to enter sewers/ surface or ground water.

- Methods and material for containment and cleaning up:

Ensure adequate ventilation.

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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 item 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.
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.

- As protection from splashes gloves made of the following materials are suitable: Nitrile rubber, NBR

- Eye protection:



Tightly sealed goggles

- Body protection: Protective work clothing

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9 Physical and chemical properties

| | |
|--|---|
| - Information on basic physical and chemical properties | |
| - General Information | |
| - Appearance: | |
| - Form: | Liquid |
| - Color: | Beige |
| - Odor: | Characteristic |
| - Odor threshold: | Not determined. |
| - pH-value: | Not determined. |
| - Change in condition | |
| - Melting point/Melting range: | Undetermined. |
| - Boiling point/Boiling range: | ≥ 260 °C (≥ 500 °F) |
| - Flash point: | 111 °C (231.8 °F) |
| - Flammability (solid, gaseous): | Not applicable. |
| - Decomposition temperature: | Not determined. |
| - Auto igniting: | 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 determined. |
| - Density at 20 °C (68 °F): | ~ 1.6536 g/cm ³ (~ 13.79929 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/water): | Not determined. |
| - Viscosity: | |
| - Dynamic at 20 °C (68 °F): | 25,000 mPas |
| - Kinematic: | Not determined. |
| - Solvent content: | |
| - VOC content: | 0.00 % 0.0 g/l / 0.00 lb/gal |
| - Solids content: | 54.7 % |
| - 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 (Acute Toxicity Estimate) | |
| Oral | LD50 > 35,714 mg/kg (rat) |
| Dermal | LD50 > 35,714 mg/kg (rabbit) |

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Trade name: Vibra-TITE® Epoxy

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CAS: 14228-73-0 Epoxy Resin

| | |
|--------|-----------------------------|
| Oral | LD50 > 2,000 mg/kg (rat) |
| Dermal | LD50 > 2,000 mg/kg (rabbit) |

- 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)**

None of the ingredients is listed.

- 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.

- Ecotoxicological effects:

- **Remark:** Toxic for fish

- Additional ecological information:**- General notes:**

Water hazard class 2 (Self-assessment): hazardous for water
Do not allow product to reach ground water, water course or sewage system.
Danger to drinking water if even small quantities leak into the ground.
Also poisonous for fish and plankton in water bodies.
Toxic for aquatic organisms

- 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

UN3082

- UN proper shipping name

- DOT

Environmentally hazardous substance, liquid, n.o.s. (LIQUID EPOXY RESIN)

- IMDG

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (LIQUID EPOXY RESIN), MARINE POLLUTANT

- IATA

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (LIQUID EPOXY RESIN)

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| | |
|---|--|
| - Transport hazard class(es) | |
| - DOT, IMDG, IATA | |
|  | |
| - Class | 9 Miscellaneous dangerous substances and articles |
| - Label | 9 |
| - Packing group | |
| - DOT, IMDG, IATA | III |
| - Environmental hazards: | |
| | Product contains environmentally hazardous substances: LIQUID EPOXY RESIN |
| - Marine pollutant: | Yes |
| | Symbol (fish and tree) |
| - Special marking (IATA): | Symbol (fish and tree) |
| - Special precautions for user | |
| - Danger code (Kemler): | Warning: Miscellaneous dangerous substances and articles |
| - EMS Number: | 90 |
| - Stowage Category | F-A,S-F A |
| - 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: No limit On cargo aircraft only: No limit |
| - Remarks: | Special marking with the symbol (fish and tree). |
| - IMDG | |
| - Limited quantities (LQ) | 5L |
| - Excepted quantities (EQ) | Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml |
| - UN "Model Regulation": | |
| | UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (LIQUID EPOXY RESIN), 9, III |

*15 Regulatory information

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

- 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.

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- Carcinogenic categories

- EPA (Environmental Protection Agency)

None of the ingredients is listed.

- TLV (Threshold Limit Value established by ACGIH)

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 Affaires

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

- **Date of preparation / last revision** 04/30/2019 / 12

- 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
 Skin Irrit. 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
 Skin Sens. 1B: Skin sensitisation – Category 1B
 STOT SE 3: Specific target organ toxicity (single exposure) – Category 3

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

- Disclaimer

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1 Identification

- Product identifier

- Trade name: Vibra-TITE® Epoxy

- Synonyms: 933 Impregnating and Encapsulating Epoxy - Part B

- Part number: VT933B

- CAS Number:
26590-20-5

- EC number:
247-830-1

- Index number:
607-240-00-0

- 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

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



GHS05 Corrosion

Eye Dam. 1 H318 Causes serious eye damage.



GHS07

Skin Sens. 1 H317 May cause an allergic skin reaction.

- Label elements

- GHS label elements The substance is classified and labeled according to the Globally Harmonized System (GHS).

- Hazard pictograms



GHS05 GHS08

- Signal word Danger

- Hazard-determining components of labeling:

1,2,3,6-tetrahydromethylphthalic anhydride

- Hazard statements

H318 Causes serious eye damage.

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

H317 May cause an allergic skin reaction.

- Precautionary statements

P261 Avoid breathing dust/fume/gas/mist/vapors/spray

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+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. |
| P310 | Immediately call a poison center/doctor. |
| P321 | Specific treatment (see on this label). |
| P333+P313 | If skin irritation or rash occurs: Get medical advice/attention. |
| P342+P311 | If experiencing respiratory symptoms: Call a poison center/doctor. |
| P363 | Wash contaminated clothing before reuse. |
| P501 | Dispose of contents/container in accordance with local/regional/national/international regulations. |

- Classification system:**- NFPA ratings (scale 0 - 4)****- HMIS-ratings (scale 0 - 4)****- Other hazards****- Results of PBT and vPvB assessment**

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

3 Composition/information on ingredients

- Chemical characterization: Substances**- CAS No. Description**

26590-20-5 1,2,3,6-tetrahydromethylphthalic anhydride

- Identification number(s)

- **EC number:** 247-830-1
- **Index number:** 607-240-00-0

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.**- 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.**- 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.

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Trade name: Vibra-TITE® Epoxy

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- Methods and material for containment and cleaning up:

Dispose contaminated material as waste according to item 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.
See Section 13 for disposal information.

7 Handling and storage

- Handling:

- **Precautions for safe handling** Ensure good ventilation/exhaustion at the workplace.
- **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 item 7.**- Control parameters****- Components with limit values that require monitoring at the workplace:**

CAS: 26590-20-5 1,2,3,6-tetrahydromethylphthalic anhydride

| | |
|-----|--|
| TLV | Short-term value: NIC-0.002 mg/m ³ , NIC-0.0003 ppm Long-term value: NIC-0.0005 mg/m ³ , NIC-0.00007 ppm NIC-TLV-SL: 0.7mg/100cm ² , DSEN, RSEN, NIC-Skin |
|-----|--|

- **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.

- 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.

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.

- **As protection from splashes gloves made of the following materials are suitable:** Nitrile rubber, NBR

- Eye protection:

Tightly sealed goggles

- Body protection: Protective work clothing

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Trade name: Vibra-TITE® Epoxy

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9 Physical and chemical properties

| | |
|--|---|
| - Information on basic physical and chemical properties | |
| - General Information | |
| - Appearance: | |
| - Form: | Liquid |
| - Color: | Colorless |
| - Odor: | Characteristic |
| - Odor threshold: | Not determined. |
| - pH-value: | Not determined. |
| - Change in condition | |
| - Melting point/Melting range: | Undetermined. |
| - Boiling point/Boiling range: | Undetermined. |
| - Flash point: | 94 °C (201.2 °F) |
| - Flammability (solid, gaseous): | Not applicable. |
| - Decomposition temperature: | Not determined. |
| - Auto igniting: | Not determined. |
| - Danger of explosion: | Product does not present an explosion hazard. |
| - Explosion limits: | |
| - Lower: | Not determined. |
| - Upper: | Not determined. |
| - Vapor pressure: | Not determined. |
| - Density at 20 °C (68 °F): | 1.21 g/cm ³ (10.09745 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/water): | Not determined. |
| - Viscosity: | |
| - Dynamic: | Not determined. |
| - Kinematic: | Not determined. |
| - VOC content: | 0.00 % 0.0 g/l / 0.00 lb/gal |
| - Solids content: | 0.0 % |
| - 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:**
 - **Primary irritant effect:**
 - **on the skin:** No irritant effect.
 - **on the eye:** Strong irritant with the danger of severe eye injury.
- **Sensitization:**
 - Sensitization possible through inhalation.
 - Sensitization possible through skin contact.

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- Additional toxicological information:**- Carcinogenic categories****- IARC (International Agency for Research on Cancer)**

Substance is not listed.

- NTP (National Toxicology Program)

Substance is not listed.

- OSHA-Ca (Occupational Safety & Health Administration)

Substance is not 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****- Sara****- Section 355 (extremely hazardous substances):**

Substance is not listed.

- Section 313 (Specific toxic chemical listings):

Substance is not listed.

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| |
|---|
| - TSCA (Toxic Substances Control Act): |
| ACTIVE |
| - Hazardous Air Pollutants |
| Substance is not listed. |
| - Proposition 65 |
| - Chemicals known to cause cancer: |
| Substance is not listed. |
| - Chemicals known to cause reproductive toxicity for females: |
| Substance is not listed. |
| - Chemicals known to cause reproductive toxicity for males: |
| Substance is not listed. |
| - Chemicals known to cause developmental toxicity: |
| Substance is not listed. |
| - Carcinogenic categories |
| - EPA (Environmental Protection Agency) |
| Substance is not listed. |
| - TLV (Threshold Limit Value established by ACGIH) |
| Substance is not listed. |
| - NIOSH-Ca (National Institute for Occupational Safety and Health) |
| Substance is not 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

- Date of preparation / last revision 04/30/2019 / 13

- 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

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)

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

Eye Dam. 1: Serious eye damage/eye irritation – Category 1

Resp. Sens. 1: Respiratory sensitisation – Category 1

Skin Sens. 1: Skin sensitisation – Category 1

- * Data compared to the previous version altered.

- Disclaimer

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