

Conforms to ANSI Z400.1-2010 Standard - HCS 2012

| Protective Clothing | General Hazard | DOT |
|---------------------|----------------|--|
| | | 1 1 1 1 2 2 2 2 2 3 3 3 3 3 3 3 3 3 3 |

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Product name : NEOGARD EPOXY MASTIC

WHITE

Product identity: 251J910000, 70724-01

Product type: epoxy paint (base for multi-component product)

1.2 Relevant identified uses of the substance or mixture and uses advised against

Field of application: buildings and metal industry.

Ready-for-use mixture : Mixing Ratio:

251J1 = 95073 1 Vol. / 251J9 3 Vol. 251J2 = 95074 1 Vol. / 251J9 3 Vol. 251J3 = 95075 1 Vol. / 251J9 3 Vol.

Identified uses: Industrial/Professional use

TSCA: Unless otherwise stated. All components are listed or exempted.

1.3 Details of the supplier of the safety data sheet

Company details: NEOGARD, a Division of Hempel (USA), Inc.

2728 Empire Central Dallas, TX 75235

Phone number: 1-214-353-1600 E-mail: hempel@hempel.com

1.4 Emergency telephone number (with hours of operation)

For Transportation Emergencies :

(24 hours)

CHEMTREC: 1-800-424-9300 (Toll-free in the U.S., Canada and the U.S. Virgin Islands) 703-527-3887

For calls originating elsewhere (Collect calls are accepted). Contract number: CCN10384

To preserve the effectiveness of arrangements for providing accurate and timely emergency response information, the basic identifying information (shipper name or contract number) must be included on

shipping papers.

If the purchaser of this product is going to be shipping this product to other locations, the purchaser must arrange for its own Emergency Information Provider to respond to transport incidents. Hempel's

24 hour response contract does not cover non-Hempel shipments.

For all other information: In USA toll free calling available: 1-800- 678-6641 or (936)-523-6000

(8 AM - 5 PM CST) See Section 4 of the safety data sheet (first aid measures).

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

OSHA/HCS status: This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR

1910.1200).

GHS Classification: SKIN IRRITATION - Category 2

EYE IRRITATION - Category 2A SKIN SENSITIZATION - Category 1 CARCINOGENICITY - Category 1A TOXIC TO REPRODUCTION - Category 2

SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 1

2.2 Label elements

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SECTION 2: Hazards identification

Hazard pictograms:





Signal word : Danger

Hazard statements: H315 - Causes skin irritation.

H317 - May cause an allergic skin reaction. H319 - Causes serious eye irritation.

H350 - May cause cancer.

H361 - Suspected of damaging fertility or the unborn child.

H372 - Causes damage to organs through prolonged or repeated exposure. (lungs)

Precautionary statements:

Prevention: Obtain special instructions before use. Do not handle until all safety precautions have been read and

understood. Wear protective gloves, protective clothing and eye or face protection. Do not breathe vapor, mist or spray. Do not eat, drink or smoke when using this product. Wash thoroughly after

handling. Contaminated work clothing must not be allowed out of the workplace.

Response: IF exposed or concerned: Get medical advice or attention. Take off contaminated clothing and wash it

before reuse. Wash contaminated clothing before reuse. IF ON SKIN: Wash with plenty of water. If skin irritation or rash occurs: Get medical advice or attention. IF IN EYES: Rinse cautiously with water for payoral minutes. Remove contact leaves if present and every to de Continue ringing. If every

for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye

irritation persists: Get medical advice or attention.

Storage: Store locked up.

Disposal: Dispose of contents and container in accordance with all local, regional, national and international

regulations.

Supplemental label elements : None known.

2.3 Other hazards

Hazards not otherwise classified: None known.

SECTION 3: Composition/information on ingredients

Product definition : Mixture
Physical state : Liquid.

| Product/ingredient name | Identifiers | % | GHS Classification |
|---|-------------|-----------|---|
| bisphenol A-(epichlorhydrin) epoxy resin MW =< 700 | 25068-38-6 | ≥25 - ≤50 | SKIN IRRITATION - Category 2 EYE IRRITATION - Category 2A SKIN SENSITIZATION - Category 1 |
| quartz (chrystalline, non respirable) | 14808-60-7 | ≥10 - ≤25 | SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 1 |
| respirable quartz | 14808-60-7 | ≥10 - ≤25 | CARCINOGÉNICITY - Ćategory 1A SPECIFIC TARGET ORGAN TOXICITY (REPEATED |
| titanium dioxide | 13463-67-7 | ≥5 - ≤10 | EXPOSURE) - Category 1 Not classified. |
| limestone | 1317-65-3 | ≥5 - ≤10 | Not classified. |
| oxirane, mono[(C12-14-alkyloxy)methyl] | 68609-97-2 | ≥5 - ≤10 | SKIN IRRITATION - Category 2 |
| derivs. | | | SKIN SENSITIZATION - Category 1 |
| 2,4-bis(ethenyl)phenol | 61788-44-1 | <1 | SKIN IRRITATION - Category 2 |
| | | | SKIN SENSITIZATION - Category 1A |
| 2,4,7,9-tetramethyl-5-decyne-4,7-diol | 126-86-3 | ≤0.3 | SERIOUS EYE DAMAGE - Category 1 |
| | | | SKIN SENSITIZATION - Category 1B |
| trimethylolpropane | 77-99-6 | ≤0.3 | TOXIC TO REPRODUCTION - Category 2 |

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

Occupational exposure limits, if available, are listed in Section 8.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

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SECTION 4: First aid measures

4.1 Description of first aid measures

General: In all cases of doubt, or when symptoms persist, seek medical attention. Never give anything by mouth

to an unconscious person.

If breathing is irregular, drowsiness, loss of consciousness or cramps: Call 911 and give immediate

treatment (first aid).

Eye contact: Check for and remove any contact lenses. Immediately flush eyes with plenty of water for at least 15

minutes, occasionally lifting the upper and lower eyelids. Seek immediate medical attention/advice.

Inhalation: Remove to fresh air and keep at rest in a position comfortable for breathing. Give nothing by mouth. If

not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. If unconscious, place in recovery position and get medical attention

immediately.

Skin contact: Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water or use

recognized skin cleanser. Do NOT use solvents or thinners.

Ingestion: If swallowed, seek medical advice immediately and show this container or label. Keep person warm

and at rest. Do not induce vomiting unless directed to do so by medical personnel. Lower the head so

that vomit will not re-enter the mouth and throat.

Protection of first-aiders: No action shall be taken involving any personal risk or without suitable training. It may be dangerous to

the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly

with water before removing it, or wear gloves.

4.2 Most important symptoms and effects, both acute and delayed

Potential acute health effects

Eye contact : Causes serious eye irritation.

Inhalation: No known significant effects or critical hazards.

Skin contact: Causes skin irritation. May cause an allergic skin reaction.

Ingestion: No known significant effects or critical hazards.

Over-exposure signs/symptoms

Eye contact : Adverse symptoms may include the following:

pain or irritation watering redness

Inhalation: No specific data.

Skin contact: Adverse symptoms may include the following:

irritation redness

Ingestion: No specific data.

4.3 Indication of any immediate medical attention and special treatment needed

Notes to physician : Not applicable.

Specific treatments: No specific treatment.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Extinguishing media: Recommended: alcohol resistant foam, CO₂, powders, water spray.

Not to be used: waterjet.

5.2 Special hazards arising from the substance or mixture

Hazards from the substance or

mixture :

In a fire or if heated, a pressure increase will occur and the container may burst. This material is toxic to aquatic life with long lasting effects. Fire water contaminated with this material must be contained

and prevented from being discharged to any waterway, sewer or drain.

Hazardous combustion products: Decomposition products may include the following materials: carbon oxides halogenated compounds

metal oxide/oxides

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SECTION 5: Firefighting measures

5.3 Advice for firefighters

Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Fire will produce dense black smoke. Exposure to decomposition products may cause a health hazard. Cool closed containers exposed to fire with water. Do not release runoff from fire to drains or watercourses. Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Avoid all direct contact with the spilled material. Refer to protective measures listed in sections 7 and 8. No action shall be taken involving any personal risk or without suitable training. If the product contaminates lakes, rivers, or sewers, inform the appropriate authorities in accordance with local regulations.

6.2 Environmental precautions

Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities.

6.3 Methods and materials for containment and cleaning up

Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Contaminated absorbent material may pose the same hazard as the spilled product.

6.4 Reference to other sections

See Section 1 for emergency contact information.

See Section 8 for information on appropriate personal protective equipment.

See Section 13 for additional waste treatment information.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Contains epoxy constituents. Avoid all possible skin contact with epoxy and amine containing products, they may cause allergic reactions. Avoid inhalation of vapour, dust and spray mist. Avoid contact with skin and eyes. Eating, drinking and smoking should be prohibited in area where this material is handled, stored and processed. Appropriate personal protective equipment: see Section 8. Always keep in containers made from the same material as the original one.

7.2 Conditions for safe storage, including any incompatibilities

Store in accordance with local regulations. Store in a cool, well-ventilated area away from incompatible materials and ignition sources. Keep out of the reach of children. Keep away from: Oxidizing agents, strong alkalis, strong acids. No smoking. Prevent unauthorized access. Containers that are opened must be carefully resealed and kept upright to prevent leakage.

7.3 Specific end use(s)

See separate Product Data Sheet for recommendations or industrial sector specific solutions.

This product may be applied using several application techniques and methods of handling may be different for each. Application techniques include [but are not limited to] brushing, rolling, and spray application [conventional, HPLV, airless, pleural component or aerosol can]. Avoid the breathing of vapors and, if spraying, do not breath spray mist or aerosols.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

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SECTION 8: Exposure controls/personal protection

| Product/ingredient name | Exposure limit values |
|---------------------------------------|---|
| quartz (chrystalline, non respirable) | OSHA PEL Z3 (United States, 6/2016). TWA: 250 mppcf / (%SiO2+5) 8 hours. Form: Respirable TWA: 10 mg/m³ / (%SiO2+2) 8 hours. Form: Respirable OSHA PEL (United States, 5/2018). [Silica, crystalline] TWA: 50 µg/m³ 8 hours. Form: Respirable dust ACGIH TLV (United States, 1/2023). [Silica, crystalline] TWA: 0.025 mg/m³ 8 hours. Form: Respirable fraction NIOSH REL (United States, 10/2020). [SILICA, CRYSTALLINE] TWA: 0.05 mg/m³ 10 hours. Form: respirable dust |
| respirable quartz | OSHA PEL Z3 (United States, 6/2016). TWA: 250 mppcf / (%SiO ₂ +5) 8 hours. Form: Respirable TWA: 10 mg/m³ / (%SiO ₂ +2) 8 hours. Form: Respirable OSHA PEL (United States, 5/2018). [Silica, crystalline] TWA: 50 µg/m³ 8 hours. Form: Respirable dust ACGIH TLV (United States, 1/2023). [Silica, crystalline] TWA: 0.025 mg/m³ 8 hours. Form: Respirable fraction NIOSH REL (United States, 10/2020). [SILICA, CRYSTALLINE] TWA: 0.05 mg/m³ 10 hours. Form: respirable dust |
| titanium dioxide | OSHA PEL (United States, 5/2018). TWA: 15 mg/m³ 8 hours. Form: Total dust ACGIH TLV (United States, 1/2023). TWA: 2.5 mg/m³ 8 hours. Form: respirable fraction, finescale particles |
| limestone | OSHA PEL (United States, 5/2018). TWA: 5 mg/m³ 8 hours. Form: Respirable fraction TWA: 15 mg/m³ 8 hours. Form: Total dust NIOSH REL (United States, 10/2020). [calcium carbonate] TWA: 5 mg/m³ 10 hours. Form: Respirable fraction TWA: 10 mg/m³ 10 hours. Form: Total |

Recommended monitoring procedures

If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to appropriate monitoring standards. Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

8.2 Exposure controls

Appropriate engineering controls

Provide local exhaust and general ventilation systems to maintain airborne concentrations below OSHA, ACGIH, and manufacturer recommended exposure limits. Local exhaust ventilation is preferred because it prevents contaminant dispersion into work areas by controlling it at its source. Use local and general exhaust ventilation to effectively remove and prevent buildup of mists/vapors/fumes generated from the handling of this product.

Note: Local exhaust ventilation is designed to capture an emitted contaminant at or near its source, before the contaminant has a chance to disperse into the workplace air. General exhaust ventilation, also called dilution ventilation, is different from local exhaust ventilation because instead of capturing emissions at their source and removing them from the air, general exhaust ventilation allows the contaminant to be emitted into the workplace air and then dilutes the concentration of the contaminant to an acceptable level (e.g., to the PEL or below).

Individual protection measures

General: Gloves must be worn for all work that may result in soiling. Apron/coveralls/protective clothing must be

worn when soiling is so great that regular work clothes do not adequately protect skin against contact

with the product. Safety eyewear should be used when there is a likelihood of exposure.

Hygiene measures: Wash hands, forearms, and face thoroughly after handling compounds and before eating, smoking,

using lavatory, and at the end of day.

Eye/face protection : Safety eyewear complying with an approved standard should be used when a risk assessment

indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of

protection: chemical splash goggles.

Hand protection: Wear chemical-resistant gloves in combination with 'basic' employee training. The quality of the

chemical-resistant protective gloves must be chosen as a function of the specific workplace

concentrations and quantity of hazardous substances.

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SECTION 8: Exposure controls/personal protection

Since the actual work situation is unknown. Supplier of gloves should be contacted in order to find the appropriate type. Below listed glove(s) should be regarded as generic advice:

Recommended: Silver Shield / Barrier / 4H gloves, nitrile rubber, butyl rubber, Viton®

Short term exposure: neoprene rubber, natural rubber (latex), polyvinyl alcohol (PVA), polyvinyl chloride

(PVC)

Body protection: Personal protective equipment for the body should be selected based on the task being performed and

the risks involved handling this product.

Wear suitable protective clothing. Always wear protective clothing when spraying.

Wear appropriate respirator when ventilation is inadequate. Be sure to use approved/certified respirator Respiratory protection:

or equivalent. It is not possible to specify precise filter type, since the actual work situation is unknown.

Supplier of respirators should be contacted in order to find the appropriate filter.

Protective clothing (pictograms):







Note: Application of paint products by spraying requires additional safety precautions: Full body suit, Full face respirator with air supplied.

0 kPa This is based on data for the following ingredient: bisphenol A-(epichlorhydrin) epoxy resin MW =

Environmental exposure controls

Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state: Liquid. Odor: Amine-like.

pH: Testing not relevant or not possible due to nature of the product.

Melting point/freezing point: -16°C This is based on data for the following ingredient: bisphenol A-(epichlorhydrin) epoxy resin MW =

< 700

Boiling point/boiling range: Testing not relevant or not possible due to nature of the product.

Closed cup: 140°C (284°F) Flash point:

Evaporation rate: Testing not relevant or not possible due to nature of the product.

Flammability: Not available. Upper/lower flammability or No specific data.

Vapor pressure:

explosive limits:

< 700

Vapor density: Testing not relevant or not possible due to nature of the product.

Relative density:

Partition coefficient (LogKow): Testing not relevant or not possible due to nature of the product. Testing not relevant or not possible due to nature of the product. Auto-ignition temperature : Decomposition temperature: Testing not relevant or not possible due to nature of the product. Testing not relevant or not possible due to nature of the product. Viscosity:

Explosive properties: Not available.

Oxidizing properties: Testing not relevant or not possible due to nature of the product.

9.2 Other information

Solvent(s) % by weight 0.25 % (w/w)

(Included excempt solvent(s)):

Water % by weight : Weighted average: 0 % VOC content (Coatings): 0.0349 lbs/gal (4.2 g/l)

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SECTION 9: Physical and chemical properties

VOC content (Regulatory): 0.035 lbs/gal (4.2 g/l)
TOC Content (Volatile): Weighted average: 3 g/l
Solvent Gas: Weighted average: 0.001 m³/l

SECTION 10: Stability and reactivity

10.1 Reactivity

No specific test data related to reactivity available for this product or its ingredients.

10.2 Chemical stability

The product is stable.

10.3 Possibility of hazardous reactions

Under normal conditions of storage and use, hazardous reactions will not occur.

10.4 Conditions to avoid

No specific data.

10.5 Incompatible materials

Reactive or incompatible with the following materials: acids.

10.6 Hazardous decomposition products

When exposed to high temperatures (i.e. in case of fire) harmful decomposition products may be formed:

Decomposition products may include the following materials: carbon oxides halogenated compounds metal oxide/oxides

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Epoxy and amine containing products can cause skin disorders such as allergic eczema. The allergy may arise after only a short exposure period.

Acute toxicity

| Product/ingredient name | Result | Species | Dose | Exposure |
|---|---------------------------------|---------|-------------|----------|
| bisphenol A-(epichlorhydrin) epoxy resin MW =< 700 | LD50 Dermal | Rabbit | >2000 mg/kg | - |
| Tesiii WW =< 700 | LD50 Dermal | Rat | >2000 mg/kg | _ |
| | LD50 Oral | Rat | >2000 mg/kg | _ |
| titanium dioxide | LC50 Inhalation Dusts and mists | Rat | >6.8 mg/l | 4 hours |
| | LD50 Dermal | Rabbit | >5000 mg/kg | - |
| | LD50 Oral | Rat | >5000 mg/kg | - |
| limestone | LD50 Oral | Rat | >2000 mg/kg | - |
| oxirane, mono[(C12-14-alkyloxy) methyl] derivs. | LD50 Dermal | Rat | >4500 mg/kg | - |
| | LD50 Oral | Rat | >5000 mg/kg | - |
| 2,4-bis(ethenyl)phenol | LD50 Dermal | Rabbit | >5010 mg/kg | - |
| , | LD50 Oral | Rat | 2500 mg/kg | - |
| trimethylolpropane | LD50 Oral | Rat | 14100 mg/kg | - |

Acute toxicity estimates

| Route | ATE value |
|---|-----------|
| No known significant effects or critical hazards. | |

Irritation/Corrosion

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SECTION 11: Toxicological information

| Product/ingredient name | Result | Species | Score | Exposure |
|--|--------------------------|---------|-------|--------------------------------------|
| bisphenol A-(epichlorhydrin) epoxy resin MW =< 700 | Eyes - Mild irritant | Rabbit | - | - |
| | Skin - Mild irritant | Rabbit | - | - |
| titanium dioxide | Skin - Mild irritant | Human | - | 72 hours 300 Micrograms Intermittent |
| oxirane, mono[(C12-14-alkyloxy) methyl] derivs. | Eyes - Mild irritant | Rabbit | - | - |
| | Skin - Moderate irritant | Rabbit | - | - |
| 2,4-bis(ethenyl)phenol | Eyes - Irritant | Rabbit | - | - |
| , , , , , , | Skin - Irritant | Rabbit | - | - |
| 2,4,7,9-tetramethyl-5-decyne- 4,7-diol | Eyes - Severe irritant | Rabbit | - | 0.1 Mililiters |
| | Skin - Mild irritant | Rabbit | - | 0.5 Grams |

Sensitizer

| Product/ingredient name | Route of exposure | Species | Result |
|--|-------------------|------------|-------------|
| bisphenol A-(epichlorhydrin) epoxy resin MW =< 700 | skin | Guinea pig | Sensitizing |
| oxirane, mono[(C12-14-alkyloxy) methyl] derivs. | skin | Guinea pig | Sensitizing |

Carcinogen Classification

| Product/ingredient name | IARC | NTP | OSHA |
|---------------------------------------|------|---------------------------------|------|
| quartz (chrystalline, non respirable) | 1 | Known to be a human carcinogen. | + |
| respirable quartz | 1 | Known to be a human carcinogen. | + |
| titanium dioxide | 2B | - | - |

Specific target organ toxicity (repeated exposure)

| Product/ingredient name | Category | Route of exposure | Target organs |
|---|--------------------------|-----------------------|----------------|
| quartz (chrystalline, non respirable) respirable quartz | Category 1 Category 1 | inhalation inhalation | lungs lungs |

Information on the likely routes of exposure

Routes of entry anticipated: Oral, Dermal, Inhalation.

Potential chronic health effects

Sensitization: Contains bisphenol A-(epichlorhydrin) epoxy resin MW =< 700, oxirane, mono[(C12-14-alkyloxy)methyl]

derivs., 2,4-bis(ethenyl)phenol. May produce an allergic reaction.

Other information: No additional known significant effects or critical hazards.

SECTION 12: Ecological information

12.1 Toxicity

Do not allow to enter drains or watercourses. Toxic to aquatic life with long lasting effects.

When spilled, this product may act as an oil, causing a film, sheen, emulsion, or sludge at or beneath the surface of a body of water. Oils of any kind can cause: (a) drowning of waterfowl due to lack of buoyancy, loss of insulating capacity of feathers, starvation and vulnerability to predators due to lack of mobility; (b) lethal effect on fish by coating gill surfaces, preventing respiration; (c) potential fish kills resulting from alteration in biochemical oxygen demand; (d) asphyxiation of benthic life forms when floating masses become engaged with surface debris and settle on the bottom; and (e) adverse aesthetic effects of fouled shoreline and beaches.

| Product/ingredient name | Result | Species | Exposure |
|--|------------------------|---------|----------|
| bisphenol A-(epichlorhydrin) epoxy resin MW =< 700 | Acute EC50 >11 mg/l | Algae | 72 hours |
| | Acute EC50 1.8 mg/l | Daphnia | 48 hours |
| | Acute LC50 2 mg/l | Fish | 96 hours |
| titanium dioxide | Acute LC50 >100 mg/l | Daphnia | 48 hours |
| | Acute LC50 >100 mg/l | Fish | 96 hours |
| oxirane, mono[(C12-14-alkyloxy) methyl] derivs. | Acute IC50 843.75 mg/l | Algae | 72 hours |
| | Acute LC50 5000 mg/l | Fish | 96 hours |
| 2,4-bis(ethenyl)phenol | Acute EC50 3.14 mg/l | Algae | 72 hours |

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SECTION 12: Ecological information

| Acute EC50 1 - 10 mg/l | Daphnia | 48 hours | |
|------------------------|---------|----------|--|
| Acute EC50 14.8 mg/l | Fish | 96 hours | |

12.2 Persistence and degradability

| Product/ingredient name | Test | Result | Dose | Inoculum |
|---|--|------------------------------|------|----------|
| bisphenol A-(epichlorhydrin) epoxy resin MW =< 700 | OECD 302B Inherent Biodegradability: Zahn-Wellens/EMPA Test | 12 % - Not readily - 28 days | - | - |
| oxirane, mono[(C12-14-alkyloxy) methyl] derivs. | - | 87 % - Readily - 28 days | - | - |
| trimethylolpropane | OECD 302B Inherent Biodegradability: Zahn-Wellens/EMPA Test | 100 % - Readily - 28 days | - | - |

| Product/ingredient name | Aquatic half-life | Photolysis | Biodegradability |
|--|-------------------|------------|------------------------|
| bisphenol A-(epichlorhydrin) epoxy resin MW =< 700 | - | - | Not readily |
| oxirane, mono[(C12-14-alkyloxy) methyl] derivs. | - | - | Readily |
| 2,4-bis(ethenyl)phenol trimethylolpropane | - - | - | Not readily Readily |

12.3 Bioaccumulative potential

| Product/ingredient name | LogP _{ow} | BCF | Potential |
|--|--------------------|-----------|-----------|
| bisphenol A-(epichlorhydrin) epoxy resin MW =< 700 oxirane, mono[(C12-14-alkyloxy)methyl] derivs. trimethylolpropane | 2.64 - 3.78 | 31 | low |
| | 3.77 | 160 - 263 | low |
| | -0.47 | <1 | low |

12.4 Mobility in soil

Soil/water partition coefficient

(K_{oc}):

No known data avaliable in our database.

Mobility:

No known data avaliable in our database.

12.5 Other adverse effects

No known significant effects or critical hazards.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Disposal should be in accordance with applicable regional, national and local laws and regulations. Local regulations may be more stringent than regional or national requirements.

The information presented below only applies to the material as supplied. The identification based on characteristic(s) or listing may not apply if the material has been used or otherwise contaminated. It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste identification and disposal methods in compliance with applicable regulations.

Refer to Section 7 and Section 8 for additional handling information and protection of employees.

The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

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SECTION 14: Transport information

Transport may take place according to national regulation or DOT for transport by road and by train, IMDG for transport by sea, IATA for Air shipment. Refer to specific Dangerous Goods Transport requirements under 49CFR, ICAO and IATA.

| | 14.1 UN no. | 14.2 Proper shipping name | 14.3 Transport hazard class(es) | 14.4 PG* | 14.5 Env* | Additional information |
|--------------|----------------|--|------------------------------------|-------------|--------------|---|
| DOT Code | UN3082 | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (bisphenol A-(epichlorhydrin) epoxy resin MW =< 700). (bisphenol A-(epichlorhydrin) epoxy resin MW =< 700) | 9 | III | Yes. | The marine pollutant mark is not required when transported on inland waterways in sizes of ≤5 L or ≤5 kg or by road, rail, or inland air in non-bulk sizes. |
| TDG Code | UN3082 | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (bisphenol A-(epichlorhydrin) epoxy resin MW =< 700). (bisphenol A-(epichlorhydrin) epoxy resin MW =< 700) | 9 | III | Yes. | Product classified as per the following sections of the Transportation of Dangerous Goods Regulations: 2.43-2.45 (Class 9), 2.7 (Marine pollutant mark). Non-bulk packages of this product are not regulated as dangerous goods when transported by road or rail. |
| SCT Code | UN3082 | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (bisphenol A-(epichlorhydrin) epoxy resin MW =< 700) | 9 | III | Yes. | The environmentally hazardous substance mark is not required when transported in sizes of ≤5 L or ≤5 kg. |
| IMDG Code | UN3082 | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (bisphenol A-(epichlorhydrin) epoxy resin MW =< 700). (bisphenol A-(epichlorhydrin) epoxy resin MW =< 700) | 9 | III | Yes. | This product is not regulated as a dangerous good when transported in sizes of ≤5 L or ≤5 kg, provided the packagings meet the general provisions of 4.1.1.1, 4.1.1.2 and 4.1.1.4 to 4.1.1.8. Emergency schedules F-A, S-F |
| IATA Code | UN3082 | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (bisphenol A-(epichlorhydrin) epoxy resin MW =< 700) | 9 | III | Yes. | This product is not regulated as a dangerous good when transported in sizes of ≤5 L or ≤5 kg, provided the packagings meet the general provisions of 5.0.2.4.1, 5.0.2.6.1.1 and 5.0.2.8. |

Code : Classification PG* : Packing group

Env.*: Environmental hazards

14.6 Special precautions for user

Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

14.7 Transport in bulk according to IMO instruments

Not applicable.

SECTION 15: Regulatory information

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

U.S. Federal regulations : Not determined.

TSCA 8(a) PAIR: silica/polydimethylsiloxane reactionproduct; 2,4-bis(ethenyl)phenol

TSCA 8(a) CDR Exempt/Partial exemption: Not determined

United States inventory (TSCA 8b): Not determined. Clean Water Act (CWA) 307: ethylbenzene; phenol

Clean Water Act (CWA) 311: xylene; ethylbenzene; 1-chloro-2,3-epoxypropane; maleic anhydride;

phenol; styrene

Clean Air Act Section 112(b) Hazardous Air Pollutants (HAPs) : Listed

| Product/ingredient name | CAS number | Concentration |
|---------------------------|------------|---------------|
| xylene | 1330-20-7 | 0.044466 |
| ethylbenzene | 100-41-4 | 0.019446 |
| 1-chloro-2,3-epoxypropane | 106-89-8 | 0.0043138 |
| styrene | 100-42-5 | <0.001 |

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SECTION 15: Regulatory information

Clean Air Act Section 602 Class I Substances : Not listed
Clean Air Act Section 602 Class II Substances : Not listed
DEA List I Chemicals (Precursor Chemicals) : Not listed
DEA List II Chemicals (Essential Chemicals) : Not listed

SARA 302/304:

| | | | SARA 302 TPQ | | SARA 304 RQ | |
|-------------------------------------|--------------|--------------|---------------------|-----------|-------------|-----------|
| Product/ingredient name | % | EHS | (lbs) | (gallons) | (lbs) | (gallons) |
| 1-chloro-2,3-epoxypropane phenol | <0.1 ≤0.1 | Yes. Yes. | 1000 500 / 10000 | 101.6 | 100 1000 | 10.2 |

SARA 304 RQ: 2318120.3 lbs / 1052426.6 kg [165587.7 gal / 626817.5 L]

SARA 311/312 Classification: SKIN IRRITATION - Category 2 EYE IRRITATION - Category 2A

SKIN SENSITIZATION - Category 1 CARCINOGENICITY - Category 1A TOXIC TO REPRODUCTION - Category 2

SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 1

| Product/ingredient name | % | Classification |
|---|-----------|---|
| bisphenol A-(epichlorhydrin) epoxy resin MW = < 700 | ≥25 - ≤50 | SKIN IRRITATION - Category 2 EYE IRRITATION - Category 2A |
| | | SKIN SENSITIZATION - Category 1 |
| quartz (chrystalline, non respirable) | ≥10 - ≤25 | SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 1 |
| respirable quartz | ≥10 - ≤25 | CARCINOGENICITY - Category 1A SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - |
| | | Category 1 |
| oxirane, mono[(C12-14-alkyloxy)methyl] derivs. | ≥5 - ≤10 | SKIN IRRITATION - Category 2 SKIN SENSITIZATION - Category 1 |
| 2,4-bis(ethenyl)phenol | <1 | SKIN IRRITATION - Category 2 |
| 2.4.7.0 totromothyd E doorno 4.7 diol | <0.2 | SKIN SENSITIZATION - Category 1A |
| 2,4,7,9-tetramethyl-5-decyne-4,7-diol | ≤0.3 | SERIOUS EYE DAMAGE - Category 1 SKIN SENSITIZATION - Category 1B |
| trimethylolpropane | ≤0.3 | TOXIC TO REPRODUCTION - Category 2 |

State regulations:

Connecticut Carcinogen Reporting: None of the components are listed. **Connecticut Hazardous Material Survey**: None of the components are listed.

Florida substances: None of the components are listed.

Illinois Chemical Safety Act: None of the components are listed.

Illinois Toxic Substances Disclosure to Employee Act: None of the components are listed.

Louisiana Reporting: None of the components are listed. **Louisiana Spill**: None of the components are listed.

Massachusetts Substances: The following components are listed: SILICA, CRYSTALLINE, QUARTZ;

SILICA, CRYSTALLINE, QUARTZ; TITANIUM DIOXIDE; CALCIUM CARBONATE

Massachusetts Spill: None of the components are listed.

Michigan Critical Material: None of the components are listed.

Minnesota Hazardous Substances: None of the components are listed.

New Jersey Spill: None of the components are listed.

New Jersey Toxic Catastrophe Prevention Act: None of the components are listed.

New Jersey Hazardous Substances: The following components are listed: SILICA, QUARTZ; SILICA,

QUARTZ; TITANIUM DIOXIDE; CALCIUM CARBONATE; 2-BUTOXY ETHANOL **New York Hazardous Substances**: None of the components are listed.

New York Toxic Chemical Release Reporting: None of the components are listed.

Pennsylvania RTK Hazardous Substances: The following components are listed: QUARTZ DUST;

QUARTZ DUST; TITANIUM OXIDE; LIMESTONE

Rhode Island Hazardous Substances: None of the components are listed.

California Prop. 65 PFF: WARNING: This product can expose you to chemicals including Epichlorohydrin, which is known to the

State of California to cause cancer and birth defects or other reproductive harm. This product can expose you to chemicals including Silica, crystalline, Silica, crystalline, Titanium dioxide, Ethylbenzene and Styrene, which are known to the State of California to cause cancer, and Bisphenol A, which is known to the State of California to cause birth defects or other reproductive harm. For more information

go to www.P65Warnings.ca.gov.

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SECTION 15: Regulatory information

| Product/ingredient name | Cancer | Reproductive | No significant risk level | Maximum acceptable dosage level |
|---------------------------------------|--------|--------------|---------------------------|---------------------------------|
| quartz (chrystalline, non respirable) | Yes. | No. | | |
| respirable quartz | Yes. | No. | | |
| titanium dioxide | Yes. | No. | | |
| 4,4'-isopropylidenediphenol | No. | Yes. | | Yes. |
| ethylbenzene | Yes. | No. | Yes. | |
| 1-chloro-2,3-epoxypropane | Yes. | Yes. | Yes. | |
| styrene | Yes. | No. | Yes. | |

SECTION 16: Other information

Note: In USA, consult Code of Federal Regulations, Title 29, Labor, Parts 1910 and 1915 concerning Remarks:

occupational safety and health standards and regulations, as well as any other applicable Federal,

State or local regulations that apply to safe practices in coating operations.

Warning! If you scrape, sand, or remove old paint, you may release lead dust. LEAD is TOXIC.

Validated by US - HSE Products Coordinator on 15 February 2024 Validation:

GHS Classification

Procedure used to derive the classification.

| Classification | Justification |
|---|--------------------|
| SKIN IRRITATION - Category 2 | Calculation method |
| EYE IRRITATION - Category 2A | Calculation method |
| SKIN SENSITIZATION - Category 1 | Calculation method |
| CARCINOGENICITY - Category 1A | Calculation method |
| TOXIC TO REPRODUCTION - Category 2 | Calculation method |
| SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 1 | Calculation method |

Hazardous Material Information System (U.S.A.)



National Fire Protection Association (U.S.A.)



Personal Protective Equipment (PPE) shown in this section is a suggestion. Since conditions vary from one work location to another consult the facility safety & health program. Customer or end user is responsible to evaluate worker exposure conditions at the site of application and determine the appropriate PPE suitable for workers at that particular facility or location.

Abbreviations and acronyms:

ANSI = American National Standards Institute HCS = Hazardous Communication System TSCA = Toxic Substances Control Act CFR = Code of federal Regulations

GHS = Globally Harmonized System of Classification and Labelling of Chemicals

OSHA = United States Occupational Health and Safety Administration

NIOSH = National Institute for Occupational Safety and Health ACGIH = American Conference of Industrial Hygienists

IARC = International Agency for Research on Cancer.

NTP = National Toxicology Program

ATE = Acute Toxicity Estimate

OECD = Organisation for Economic Co-operation and Development

BCF = Bioconcentration Factor

DOT = United States Department of Transportation

ERG = Emergency Response Guide TDG = Transport of Dangerous Goods, Canada

SCT = Transportation & Communications Ministry, Mexico

IMDG = International Maritime Dangerous Goods IATA = International Air Transport Association

SARA = Superfund Amendments Reauthorization Act

EPCRA = Emergency Planning and Community Right to Know Act

Notice to reader

Indicates information that has changed from previously issued version.

To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

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