

# R-2634 Part A

## Safety Data Sheet

According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations  
Revision Date: 10/24/2022 Date of Issue: 01/28/2014

### SECTION 1: Identification

#### 1.1. Product Identifier

Product Form Mixture  
Product Name R-2634 Part A  
Synonyms Silicone Elastomer

#### 1.2. Relevant Identified Uses of the Substance or Mixture and Uses Advised Against

Use of the Substance/Mixture For professional use only.

#### 1.3. Details of the Supplier of the Safety Data Sheet

NuSil Technology LLC  
1050 Cindy Lane  
Carpinteria, California 93013  
USA  
(805) 684-8780

[productstewardship@avantorsciencesgcc.com](mailto:productstewardship@avantorsciencesgcc.com)

[www.nusil.com](http://www.nusil.com)

#### 1.4. Emergency Telephone Number

Emergency Number 800-424-9300 CHEMTREC (in US); +1 703-527-3887 CHEMTREC (International and Maritime)

### SECTION 2: Hazards Identification

#### 2.1. Classification of the Substance or Mixture

##### GHS-US Classification

Skin Sens. 1 H317

Aquatic Acute 1 H400

Aquatic Chronic 3 H412

Full text of hazard classes and H-statements : see section 1.6

#### 2.2. Label Elements

##### GHS-US Labeling

Hazard Pictograms (GHS-US)



GHS07

GHS09

Signal Word (GHS-US)

Warning

Hazard Statements (GHS-US)

H317 - May cause an allergic skin reaction

H400 - Very toxic to aquatic life

H412 - Harmful to aquatic life with long lasting effects

Precautionary Statements (GHS-US)

P261 - Avoid breathing dust, fume, mist, spray, vapors.

P272 - Contaminated work clothing must not be allowed out of the workplace.

P273 - Avoid release to the environment.

P280 - Wear eye protection, protective clothing, protective gloves.

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

P321 - Specific treatment (see Section 4 on this SDS).

P333+P313 - If skin irritation or rash occurs: Get medical

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advice/attention.

P363 - Wash contaminated clothing before reuse.

P391 - Collect spillage.

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

### 2.3. Other Hazards

Other Hazards Not Contributing to the Classification Exposure may aggravate pre-existing eye, skin, or respiratory conditions.

### 2.4. Unknown Acute Toxicity (GHS-US)

No data available

## SECTION 3: Composition/Information On Ingredients

### 3.1. Substances

Not applicable

### 3.2. Mixtures

| Name   | Product Identifier   | %       | GHS-US Classification  |
|--|----------------------|---------|--|
| Nickel*  | (CAS-No.) 7440-02-0  | 60 - 65 | Skin Sens. 1, H317<br>Carc. 2, H351<br>STOT RE 1, H372<br>Aquatic Acute 1, H400<br>Aquatic Chronic 3, H412<br>Comb. Dust |
| Silver*  | (CAS-No.) 7440-22-4  | 10 - 15 | Not classified   |
| Glass, oxide, chemicals*   | (CAS-No.) 65997-17-3 | 5 - 10  | Not classified   |
| Silanamine, 1,1,1-trimethyl-N-(trimethylsilyl)-, hydrolysis products with silica | (CAS No) 68909-20-6  | < 3     | Not classified   |

Full text of H-phrases: see section 1.6

The specific chemical identity and/or exact percentage of composition have been withheld as a trade secret [29 CFR 1910.1200].

\*Nickel and Glass are present as Silver coated spheres. The spheres are bound in a silicon matrix. Therefore, the respiratory hazards usually associated with Nickel are not applicable to the product.

## SECTION 4: First Aid Measures

### 4.1. Description of First-aid Measures

First-aid Measures General Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

First-aid Measures After Inhalation When symptoms occur: go into open air and ventilate suspected area. Obtain medical attention if breathing difficulty persists.

First-aid Measures After Skin Contact Remove contaminated clothing. Drench affected area with water for at least 15 minutes. Obtain medical attention if irritation/rash develops or persists.

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First-aid Measures After Eye Contact Remove contact lenses, if present and easy to do. Continue rinsing. Rinse cautiously with water for at least 15 minutes. Obtain medical attention.

First-aid Measures After Ingestion Rinse mouth. Do NOT induce vomiting. Obtain medical attention.

### 4.2. Most Important Symptoms and Effects Both Acute and Delayed

Symptoms/Injuries Skin sensitization.

Symptoms/Injuries After Inhalation Prolonged exposure may cause irritation.

Symptoms/Injuries After Skin Contact May cause an allergic skin reaction.

Symptoms/Injuries After Eye Contact May cause slight irritation to eyes.

Symptoms/Injuries After Ingestion Ingestion may cause adverse effects.

Chronic Symptoms Nickel: May cause a form of dermatitis known as nickel itch and intestinal irritation, which may cause disorders, convulsions and asphyxia. Silver: Chronic skin contact or ingestion of silver dust, salts or fume can result in a condition known as Argyria, a condition with bluish pigmentation of the skin and eyes.

### 4.3. Indication of Any Immediate Medical Attention and Special Treatment Needed

If exposed or concerned, get medical advice and attention. If medical advice is needed, have product container or label at hand.

## SECTION 5: Fire-Fighting Measures

### 5.1. Extinguishing Media

Suitable Extinguishing Media : Water spray, fog, carbon dioxide (CO<sub>2</sub>), alcohol-resistant foam, or dry chemical.

Unsuitable Extinguishing Media : Do not use a heavy water stream. Use of heavy stream of water may spread fire.

### 5.2. Special Hazards Arising From the Substance or Mixture

Fire Hazard Not considered flammable but may burn at high temperatures.

Explosion Hazard Product is not explosive.

Reactivity Hazardous reactions will not occur under normal conditions.

### 5.3. Advice for Firefighters

Precautionary Measures Fire Exercise caution when fighting any chemical fire.

Firefighting Instructions Use water spray or fog for cooling exposed containers.

Protection During Firefighting Do not enter fire area without proper protective equipment, including respiratory protection.

Hazardous Combustion Products Oxides of silver. nickel oxide. Carbon oxides (CO, CO<sub>2</sub>). Silicon oxides. Formaldehyde.

Other Information Do not allow run-off from firefighting to enter drains or water courses.

## SECTION 6: Accidental Release Measures

### 6.1. Personal Precautions, Protective Equipment And Emergency Procedures

General Measures Avoid breathing (vapor, mist, spray). Do not get in eyes, on skin, or on clothing.

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### 6.1.1. For Non-Emergency Personnel

Protective Equipment Use appropriate personal protective equipment (PPE).  
Emergency Procedures Evacuate unnecessary personnel.

### 6.1.2. For emergency responders

Protective Equipment Equip cleanup crew with proper protection.  
Emergency Procedures Upon arrival at the scene, a first responder is expected to recognize the presence of dangerous goods, protect oneself and the public, secure the area, and call for the assistance of trained personnel as soon as conditions permit. Ventilate area.

### 6.2. Environmental Precautions

Prevent entry to sewers and public waters. Avoid release to the environment. Collect spillage.

### 6.3. Methods and Materials for Containment and Cleaning Up

For Containment Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams.

Methods for Cleaning Up Clean up spills immediately and dispose of waste safely. Transfer spilled material to a suitable container for disposal. Contact competent authorities after a spill.

### 6.4. Reference to Other Sections

See Section 8 for exposure controls and personal protection and Section 13 for disposal considerations.

## SECTION 7: Handling And Storage

### 7.1. Precautions for Safe Handling

Additional Hazards When Processed Any proposed use of this product in elevated-temperature processes should be thoroughly evaluated to assure that safe operating conditions are established and maintained.

Precautions for Safe Handling Avoid prolonged contact with eyes, skin and clothing. Avoid breathing vapors, mist, spray. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

Hygiene Measures Handle in accordance with good industrial hygiene and safety procedures.

### 7.2. Conditions for Safe Storage, Including Any Incompatibilities

Technical Measures Comply with applicable regulations.

Storage Conditions Keep container closed when not in use. Store in a dry, cool place. Keep/Store away from direct sunlight, extremely high or low temperatures and incompatible materials.

Incompatible Materials Strong acids, strong bases, strong oxidizers.

### 7.3. Specific End Use(S)

For professional use only.

## SECTION 8: Exposure Controls/Personal Protection

### 8.1. Control Parameters

For substances listed in section 3 that are not listed here, there are no established exposure limits from the manufacturer, supplier, importer, or the appropriate advisory agency including: ACGIH (TLV), or OSHA (PEL).

Nickel (7440-02-0)

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|   |                                     |   |
|---|-------------------------------------|---|
| USA ACGIH   | ACGIH TWA (mg/m <sup>3</sup> )      | 1.5 mg/m <sup>3</sup> (inhalable particulate matter)                            |
| USA ACGIH   | ACGIH chemical category             | Not Suspected as a Human Carcinogen   |
| USA OSHA  | OSHA PEL (TWA) (mg/m <sup>3</sup> ) | 1 mg/m <sup>3</sup>   |
| Glass, oxide, chemicals (65997-17-3)  |                                     |   |
| USA OSHA  | OSHA PEL (TWA) (mg/m <sup>3</sup> ) | 15 mg/m <sup>3</sup> total dust, 5 mg/m <sup>3</sup> , respirable fraction 8 hr |
| Silver (7440-22-4)  |                                     |   |
| USA ACGIH   | ACGIH TWA (mg/m <sup>3</sup> )      | 0.1 mg/m <sup>3</sup> (dust and fume)   |
| USA OSHA  | OSHA PEL (TWA) (mg/m <sup>3</sup> ) | 0.01 mg/m <sup>3</sup>  |
| Silanamine, 1,1,1-trimethyl-N-(trimethylsilyl)-, hydrolysis products with silica (68909-20-6) |                                     |   |
| USA OSHA  | OSHA PEL (TWA) (mg/m <sup>3</sup> ) | 6 mg/m <sup>3</sup>   |
| USA OSHA  | OSHA PEL (TWA) (ppm)                | 20 mppcf (80 mg/m <sup>3</sup> /%SiO <sub>2</sub> )                             |

### 8.2. Exposure Controls

Appropriate Engineering Controls

Suitable eye/body wash equipment should be available in the vicinity of any potential exposure. Ensure adequate ventilation, especially in confined areas. Ensure all national/local regulations are observed.

Personal Protective Equipment

Gloves. Protective clothing. Protective goggles.



Materials For Protective Clothing

Chemically resistant materials and fabrics.

Hand Protection

Wear protective gloves.

Eye And Face Protection

Chemical safety goggles.

Skin And Body Protection

Wear suitable protective clothing.

Respiratory Protection

If exposure limits are exceeded or irritation is experienced, approved respiratory protection should be worn. In case of inadequate ventilation, oxygen deficient atmosphere, or where exposure levels are not known wear approved respiratory protection.

Other Information

When using, do not eat, drink or smoke.

## SECTION 9: Physical and Chemical Properties

### 9.1. Information on Basic Physical and Chemical Properties

|                           |                    |
|---------------------------|--------------------|
| Physical State            | Liquid             |
| Appearance                | Grey to Grey Green |
| Odor                      | Odorless           |
| Odor Threshold            | No data available  |
| pH                        | No data available  |
| Evaporation Rate          | No data available  |
| Melting Point             | No data available  |
| Freezing Point            | No data available  |
| Boiling Point             | No data available  |
| Flash Point               | > 135 °C (275 °F)  |
| Auto-ignition Temperature | No data available  |

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|                                       |                   |
|---------------------------------------|-------------------|
| Decomposition Temperature             | No data available |
| Flammability (solid, gas)             | Not applicable    |
| Vapor Pressure                        | No data available |
| Relative Vapor Density at 20°C        | No data available |
| Relative Density                      | >1 (water = 1)    |
| Specific Gravity                      | No data available |
| Solubility                            | No data available |
| Partition Coefficient n-Octanol/Water | No data available |
| Viscosity                             | No data available |

### 9.2. Other Information

VOC Content < 1 %

## SECTION 10: Stability and Reactivity

### 10.1. Reactivity

Hazardous reactions will not occur under normal conditions.

### 10.2. Chemical Stability

Stable under recommended handling and storage conditions (see section 7).

### 10.3. Possibility of Hazardous Reactions

Hazardous polymerization will not occur.

### 10.4. Conditions to Avoid

Direct sunlight, extremely high or low temperatures, and incompatible materials.

### 10.5. Incompatible Materials

Strong acids, strong bases, strong oxidizers.

### 10.6. Hazardous Decomposition Products

Thermal decomposition generates: Carbon oxides (CO, CO<sub>2</sub>). Silicon oxides. Oxides of nickel.

Oxides of Silver. Will decompose above 150 °C (>300° F) releasing formaldehyde vapors.

Formaldehyde is a potential carcinogen and can act as a potential skin and respiratory sensitizer.

Formaldehyde can also cause respiratory and eye irritation.

## SECTION 11: Toxicological Information

### 11.1. Information on Toxicological Effects

Acute Toxicity (Oral) : Not classified

Acute Toxicity (Dermal) : Not classified

Acute Toxicity (Inhalation) : Not classified

|                                   |                                      |
|-----------------------------------|--------------------------------------|
| R-2634 Part A                     |                                      |
| Nickel (7440-02-0)                |                                      |
| LD50 Oral Rat                     | > 9000 mg/kg                         |
| LC50 Inhalation Rat               | > 10.2 mg/l (Exposure time: 1 h)     |
| Silver (7440-22-4)                |                                      |
| LD50 Oral Rat                     | > 5000 mg/kg                         |
| LD50 Dermal Rat                   | > 2000 mg/kg                         |
| Skin Corrosion/Irritation         | Not classified                       |
| Serious Eye Damage/Irritation     | Not classified                       |
| Respiratory or Skin Sensitization | May cause an allergic skin reaction. |
| Germ Cell Mutagenicity            | Not classified                       |
| Carcinogenicity                   | Not classified.                      |
| Nickel (7440-02-0)                |                                      |

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|   |  |
|---|--|
| IARC Group                                | 2B   |
| National Toxicology Program (NTP) Status  | Reasonably anticipated to be Human Carcinogen. |
| OSHA Hazard Communication Carcinogen List | In OSHA Hazard Communication Carcinogen list.  |

|  |  |
|--|--|
| Reproductive Toxicity                              | : Not classified   |
| Specific Target Organ Toxicity (Single Exposure)   | : Not classified   |
| Specific Target Organ Toxicity (Repeated Exposure) | : Not classified.  |
| Aspiration Hazard                                  | Not classified   |
| Symptoms/Injuries After Inhalation                 | Prolonged exposure may cause irritation.   |
| Symptoms/Injuries After Skin Contact               | May cause an allergic skin reaction.   |
| Symptoms/Injuries After Eye Contact                | May cause slight irritation to eyes.   |
| Symptoms/Injuries After Ingestion                  | Ingestion may cause adverse effects.   |
| Chronic Symptoms                                   | Nickel: May cause a form of dermatitis known as nickel itch and intestinal irritation, which may cause disorders, convulsions and asphyxia. Silver: Chronic skin contact or ingestion of silver dust, salts or fume can result in a condition known as Argyria, a condition with bluish pigmentation of the skin and eyes. |

## SECTION 12: Ecological Information

### 12.1. Toxicity

Ecology - General Very toxic to aquatic life. Harmful to aquatic life with long lasting effects.

|                                |  |
|--------------------------------|--|
| Nickel (7440-02-0)             |  |
| LC50 Fish 1                    | 100 mg/l (Exposure time: 96 h - Species: Brachydanio rerio)  |
| EC50 Daphnia 1                 | 121.6 µg/l (Exposure time: 48h - Species: Ceriodaphnia dubia [static])                               |
| LC50 Fish 2                    | 15.3 mg/l  |
| EC50 Daphnia 2                 | 1 mg/l (Exposure time: 48 h - Species: Daphnia magna [Static])                                       |
| EC50 Other Aquatic Organisms 2 | 0.174 (0.174 - 0.311) mg/l (Exposure time: 96 h - Species: Pseudokirchneriella subcapitata [static]) |
| Silver (7440-22-4)             |  |
| LC50 Fish 1                    | 0.00155 - 0.00293 mg/l (Exposure time: 96 h - Species: Pimephales promelas [static])                 |
| EC50 Daphnia 1                 | 0.00024 mg/l (Exposure time: 48 h - Species: Daphnia magna [Static])                                 |
| LC50 Fish 2                    | 0.0062 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [flow-through])                      |
| NOEC Chronic Fish              | 390 ng/l (Exposure time: 28d - Species: Pimephales promelas)   |

### 12.2. Persistence and Degradability

|                               |   |
|-------------------------------|---|
| R-2634 Part A                 |   |
| Persistence and Degradability | May cause long-term adverse effects in the environment. |

### 12.3. Bioaccumulative Potential

|                           |                  |
|---------------------------|------------------|
| R-2634 Part A             |                  |
| Bioaccumulative Potential | Not established. |

### 12.4. Mobility In Soil

No additional information available

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### 12.5. Other Adverse Effects

Other Information Avoid release to the environment.

## SECTION 13: Disposal Considerations

### 13.1. Waste Treatment Methods

Waste Disposal Dispose of contents/container in accordance with local, regional, national, and international regulations.  
Recommendations  
Additional Information Container may remain hazardous when empty. Continue to observe all precautions.  
Ecology - Waste Materials Avoid release to the environment. This material is hazardous to the aquatic environment. Keep out of sewers and waterways.

## SECTION 14: Transport Information

The shipping description(s) stated herein were prepared in accordance with certain assumptions at the time the SDS was authored, and can vary based on a number of variables that may or may not have been known at the time the SDS was issued.

### 14.1. In Accordance with DOT

Proper Shipping Name ENVIRONMENTALLY HAZARDOUS SUBSTANCES, LIQUID, N.O.S. (contains Nickel, Silver)  
Hazard Class 9  
Identification Number UN3082  
Label Codes 9  
Packing Group III  
Marine Pollutant Marine pollutant  
ERG Number 171



### 14.2. In Accordance with IMDG

Proper Shipping Name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (contains Nickel, Silver)  
Hazard Class 9  
Identification Number UN3082  
Packing Group III  
Label Codes 9  
EmS-No. (Fire) F-A  
EmS-No. (Spillage) S-F  
Marine Pollutant Marine pollutant  
MFAG Number 171



### 14.3. In Accordance with IATA

Proper Shipping Name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (contains Nickel, Silver)  
Packing Group III  
Identification Number UN3082  
Hazard Class 9  
Label Codes 9  
ERG Code (IATA) 9L





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### SECTION 15: Regulatory Information

#### 15.1. US Federal Regulations

All components in this mixture are listed on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory, have been exempted, are not listed, not disclosed due to CBI requirements or disclosure rules according to the relevant regulation.

|   |  |
|---|--|
| R-2634 Part A   |  |
| SARA Section 311/312 Hazard Classes                                 | Health hazard - Respiratory or skin sensitization  |
| Nickel (7440-02-0)  |  |
| Subject to reporting requirements of United States SARA Section 313 |  |
| CERCLA RQ   | 100 lb (only applicable if particles are < 100 µm) |
| SARA Section 313 - Emission Reporting                               | 0.1 %  |
| Silver (7440-22-4)  |  |
| Subject to reporting requirements of United States SARA Section 313 |  |
| CERCLA RQ   | 1000 lb < 100 µm CERCLA/SARA RQ CHANGE TITLE       |
| SARA Section 313 - Emission Reporting                               | 1 %  |

#### 15.2. US State Regulations

|  |  |
|--|--|
| Nickel (7440-02-0)   |  |
| U.S. - California - Proposition 65 - Carcinogens List  | WARNING: This product contains chemicals known to the State of California to cause cancer. |
| Nickel (7440-02-0)   |  |
| U.S. - California - Priority Toxic Pollutants - Freshwater Criteria                                    |  |
| U.S. - California - Priority Toxic Pollutants - Human Health Criteria                                  |  |
| U.S. - California - Priority Toxic Pollutants - Saltwater Criteria                                     |  |
| U.S. - California - SCAQMD - Toxic Air Contaminants - Carcinogens                                      |  |
| U.S. - California - SCAQMD - Toxic Air Contaminants - Non-Cancer Acute                                 |  |
| U.S. - California - SCAQMD - Toxic Air Contaminants - Non-Cancer Chronic                               |  |
| U.S. - California - SDAPCD - Toxic Air Contaminants - Carcinogenic Impacts Must Be Calculated          |  |
| U.S. - California - Toxic Air Contaminant List (AB 1807, AB 2728)                                      |  |
| U.S. - Connecticut - Drinking Water Quality Standards - Maximum Contaminant Levels                     |  |
| U.S. - Connecticut - Hazardous Air Pollutants - HLVs (30 min)  |  |
| U.S. - Connecticut - Hazardous Air Pollutants - HLVs (8 hr)  |  |
| U.S. - Connecticut - Water Quality Standards - Acute Freshwater Aquatic Life Criteria                  |  |
| U.S. - Connecticut - Water Quality Standards - Acute Saltwater Aquatic Life Criteria                   |  |
| U.S. - Connecticut - Water Quality Standards - Chronic Freshwater Aquatic Life Criteria                |  |
| U.S. - Connecticut - Water Quality Standards - Chronic Saltwater Aquatic Life Criteria                 |  |
| U.S. - Connecticut - Water Quality Standards - Consumption of Organisms Only                           |  |
| U.S. - Connecticut - Water Quality Standards - Consumption of Water and Organisms                      |  |
| U.S. - Connecticut - Water Quality Standards - Health Designations                                     |  |
| U.S. - Delaware - Pollutant Discharge Requirements - Reportable Quantities                             |  |
| U.S. - Florida - Drinking Water Standards - Inorganic Contaminants - Maximum Contaminant Levels (MCLs) |  |
| U.S. - Idaho - Carcinogenic Toxic Air Pollutants - Acceptable Ambient Concentrations                   |  |
| U.S. - Idaho - Carcinogenic Toxic Air Pollutants - Emission Levels (ELs)                               |  |
| U.S. - Idaho - Occupational Exposure Limits - TWAs   |  |
| U.S. - Illinois - Toxic Air Contaminant Carcinogens  |  |

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U.S. - Illinois - Toxic Air Contaminants  
U.S. - Maine - Air Pollutants - Hazardous Air Pollutants  
U.S. - Maine - Chemicals of Concern  
U.S. - Maryland - Surface Water Quality Standards - Acute Freshwater Aquatic Life  
U.S. - Maryland - Surface Water Quality Standards - Acute Saltwater Aquatic Life Criteria  
U.S. - Maryland - Surface Water Quality Standards - Chronic Freshwater Aquatic Life  
U.S. - Maryland - Surface Water Quality Standards - Chronic Saltwater Aquatic Life Criteria  
U.S. - Maryland - Surface Water Quality Standards - Consumption of Organisms Only  
U.S. - Maryland - Surface Water Quality Standards - Consumption of Water and Organisms  
U.S. - Massachusetts - Allowable Ambient Limits (AALs)  
U.S. - Massachusetts - Allowable Threshold Concentrations (ATCs)  
U.S. - Massachusetts - Drinking Water Guidelines  
U.S. - Massachusetts - Oil & Hazardous Material List - Groundwater Reportable Concentration - Reporting Category 1  
U.S. - Massachusetts - Oil & Hazardous Material List - Groundwater Reportable Concentration - Reporting Category 2  
U.S. - Massachusetts - Oil & Hazardous Material List - Reportable Quantity  
U.S. - Massachusetts - Oil & Hazardous Material List - Soil Reportable Concentration - Reporting Category 1  
U.S. - Massachusetts - Oil & Hazardous Material List - Soil Reportable Concentration - Reporting Category 2  
RTK - U.S. - Massachusetts - Right To Know List  
U.S. - Massachusetts - Threshold Effects Exposure Limits (TEELs)  
U.S. - Massachusetts - Toxics Use Reduction Act  
U.S. - Michigan - Occupational Exposure Limits - TWAs  
U.S. - Michigan - Polluting Materials List  
U.S. - Minnesota - Chemicals of High Concern  
U.S. - Minnesota - Hazardous Substance List  
U.S. - Minnesota - Permissible Exposure Limits - TWAs  
U.S. - Nebraska - Drinking Water - Maximum Contaminant Levels (MCLs)  
U.S. - New Hampshire - Prohibited Volatile Organic Compounds  
U.S. - New Hampshire - Regulated Toxic Air Pollutants - Ambient Air Levels (AALs) - 24-Hour  
U.S. - New Hampshire - Regulated Toxic Air Pollutants - Ambient Air Levels (AALs) - Annual  
U.S. - New Jersey - Discharge Prevention - List of Hazardous Substances  
U.S. - New Jersey - Environmental Hazardous Substances List  
RTK - U.S. - New Jersey - Right to Know Hazardous Substance List  
U.S. - New Jersey - Special Health Hazards Substances List  
U.S. - New Mexico - Water Quality - Standards for Ground Water of 10,000 mg/L TDS Concentration or Less  
U.S. - New York - Occupational Exposure Limits - TWAs  
U.S. - New York - Priority Chemical Avoidance List  
U.S. - New York - Reporting of Releases Part 597 - List of Hazardous Substances  
U.S. - North Carolina - Control of Toxic Air Pollutants  
U.S. - North Dakota - Air Pollutants - Guideline Concentrations - 8-Hour  
U.S. - North Dakota - Water Quality Standards - Aquatic Life Acute Value for Classes I, IA, II, III  
U.S. - North Dakota - Water Quality Standards - Aquatic Life Chronic Value for Classes I, IA, II, III  
U.S. - North Dakota - Water Quality Standards - Human Health Value for Class III  
U.S. - North Dakota - Water Quality Standards - Human Health Value for Classes I, IA, II  
U.S. - Oregon - Permissible Exposure Limits - TWAs  
U.S. - California - Safer Consumer Products - Initial List of Candidate Chemicals and Chemical Groups

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U.S. - Pennsylvania - Beneficial Use of Sewage Sludge by Land Application - Pollutant Ceiling Limits  
RTK - U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List  
RTK - U.S. - Pennsylvania - RTK (Right to Know) - Special Hazardous Substances  
RTK - U.S. - Pennsylvania - RTK (Right to Know) List  
U.S. - Rhode Island - Air Toxics - Acceptable Ambient Levels - 1-Hour  
U.S. - Rhode Island - Air Toxics - Acceptable Ambient Levels - 24-Hour  
U.S. - Rhode Island - Air Toxics - Acceptable Ambient Levels - Annual  
U.S. - Rhode Island - Water Quality Standards - Acute Freshwater Aquatic Life Criteria  
U.S. - Rhode Island - Water Quality Standards - Acute Saltwater Aquatic Life Criteria  
All concentrations are expressed as percentages by weight unless the ingredient is a gas.  
Gas concentrations are expressed as percentages by volume.  
U.S. - Rhode Island - Water Quality Standards - Human Health Criteria for Consumption of Aquatic Organisms Only  
U.S. - Rhode Island - Water Quality Standards - Human Health Criteria for Consumption of Water and Aquatic Organisms  
U.S. - South Carolina - Toxic Air Pollutants - Maximum Allowable Concentrations  
U.S. - South Carolina - Toxic Air Pollutants - Pollutant Categories  
U.S. - Tennessee - Occupational Exposure Limits - TWAs  
U.S. - Texas - Effects Screening Levels - Long Term  
U.S. - Texas - Effects Screening Levels - Short Term  
U.S. - Utah - Drinking Water - Maximum Contaminant Levels (MCLs)  
U.S. - Vermont - Hazardous Waste - Hazardous Constituents  
U.S. - Vermont - Permissible Exposure Limits - TWAs  
U.S. - Virginia - Water Quality Standards - Acute Freshwater Aquatic Life  
U.S. - Virginia - Water Quality Standards - Acute Saltwater Aquatic Life  
U.S. - Virginia - Water Quality Standards - Chronic Freshwater Aquatic Life  
U.S. - Virginia - Water Quality Standards - Chronic Saltwater Aquatic Life  
U.S. - Virginia - Water Quality Standards - Public Water Supply Effluent Limits  
U.S. - Virginia - Water Quality Standards - Surface Waters Not Used for the Public Water Supply Effluent Limits  
U.S. - Washington - Dangerous Waste - Dangerous Waste Constituents List  
U.S. - Washington - Permissible Exposure Limits - STELs  
U.S. - Washington - Permissible Exposure Limits - TWAs  
U.S. - Wisconsin - Hazardous Air Contaminants - All Sources - Emissions From Stack Heights 25 Feet to Less Than 40 Feet  
U.S. - Wisconsin - Hazardous Air Contaminants - All Sources - Emissions From Stack Heights 40 Feet to Less Than 75 Feet  
U.S. - Wisconsin - Hazardous Air Contaminants - All Sources - Emissions From Stack Heights 75 Feet or Greater  
U.S. - Wisconsin - Hazardous Air Contaminants - All Sources - Emissions From Stack Heights Less Than 25 Feet  
U.S. - Alaska - Water Quality Standards - Acute Aquatic Life Criteria for Fresh Water  
U.S. - Alaska - Water Quality Standards - Chronic Aquatic Life Criteria for Fresh Water  
U.S. - Alaska - Water Quality Standards - Acute Aquatic Life Criteria for Marine Water  
U.S. - Alaska - Water Quality Standards - Chronic Aquatic Life Criteria for Marine Water  
U.S. - Arkansas - Surface Water Quality Standards - Chronic Aquatic Life Criteria  
U.S. - Arkansas - Surface Water Quality Standards - Acute Aquatic Life Criteria

Glass, oxide, chemicals (65997-17-3)

U.S. - Connecticut - Hazardous Air Pollutants - HLVs (30 min)

U.S. - Connecticut - Hazardous Air Pollutants - HLVs (8 hr)

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U.S. - Minnesota - Hazardous Substance List  
U.S. - Oregon - Permissible Exposure Limits - TWAs  
U.S. - Texas - Effects Screening Levels - Long Term  
U.S. - Texas - Effects Screening Levels - Short Term  
U.S. - Washington - Permissible Exposure Limits - STELs  
U.S. - Washington - Permissible Exposure Limits - TWAs

### Silver (7440-22-4)

U.S. - California - Priority Toxic Pollutants - Freshwater Criteria  
U.S. - California - Priority Toxic Pollutants - Saltwater Criteria  
U.S. - California - SCAQMD - Toxic Air Contaminants With Proposed Risk Values  
U.S. - California - Toxic Air Contaminant List (AB 1807, AB 2728)  
U.S. - Colorado - Hazardous Wastes - Maximum Concentration for the Toxicity Characteristics  
U.S. - Colorado - Primary Drinking Water Regulations - Secondary Maximum Contaminant Levels (SMCLs)  
U.S. - Connecticut - Drinking Water Quality Standards - Groundwater Sources  
U.S. - Connecticut - Drinking Water Quality Standards - Maximum Contaminant Levels  
U.S. - Connecticut - Hazardous Air Pollutants - HLVs (30 min)  
U.S. - Connecticut - Hazardous Air Pollutants - HLVs (8 hr)  
U.S. - Connecticut - Water Quality Standards - Acute Freshwater Aquatic Life Criteria  
U.S. - Connecticut - Water Quality Standards - Acute Saltwater Aquatic Life Criteria  
U.S. - Connecticut - Water Quality Standards - Consumption of Organisms Only  
U.S. - Connecticut - Water Quality Standards - Consumption of Water and Organisms  
U.S. - Connecticut - Water Quality Standards - Health Designations  
U.S. - Delaware - Pollutant Discharge Requirements - Reportable Quantities  
U.S. - Florida - Drinking Water Standards - Secondary Maximum Contaminant Levels (SMCLs)  
U.S. - Idaho - Non-Carcinogenic Toxic Air Pollutants - Acceptable Ambient Concentrations  
U.S. - Idaho - Non-Carcinogenic Toxic Air Pollutants - Emission Levels (ELs)  
U.S. - Idaho - Occupational Exposure Limits - TWAs  
U.S. - Maryland - Surface Water Quality Standards - Acute Freshwater Aquatic Life  
U.S. - Maryland - Surface Water Quality Standards - Acute Saltwater Aquatic Life Criteria  
U.S. - Massachusetts - Drinking Water - Secondary Maximum Contaminant Levels (SMCLs)  
U.S. - Massachusetts - Oil & Hazardous Material List - Groundwater Reportable Concentration - Reporting Category 1  
U.S. - Massachusetts - Oil & Hazardous Material List - Groundwater Reportable Concentration - Reporting Category 2  
U.S. - Massachusetts - Oil & Hazardous Material List - Reportable Quantity  
U.S. - Massachusetts - Oil & Hazardous Material List - Soil Reportable Concentration - Reporting Category 1  
U.S. - Massachusetts - Oil & Hazardous Material List - Soil Reportable Concentration - Reporting Category 2  
RTK - U.S. - Massachusetts - Right To Know List  
U.S. - Massachusetts - Toxics Use Reduction Act  
U.S. - Michigan - Occupational Exposure Limits - TWAs  
U.S. - Michigan - Polluting Materials List  
U.S. - Minnesota - Chemicals of High Concern  
U.S. - Minnesota - Groundwater Health Risk Limits  
U.S. - Minnesota - Hazardous Substance List  
U.S. - Minnesota - Permissible Exposure Limits - TWAs  
U.S. - Missouri - Drinking Water - Secondary Maximum Contaminant Levels (SMCLs)  
U.S. - Nebraska - Maximum Concentration of Contaminants for the Toxicity Characteristic

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U.S. - Nevada - Drinking Water - Secondary Maximum Contaminant Levels (SMCLs)  
U.S. - New Hampshire - Drinking Water - Secondary Maximum Contaminant Levels (SMCLs)  
U.S. - New Hampshire - Regulated Toxic Air Pollutants - Ambient Air Levels (AALs) - 24-Hour  
U.S. - New Hampshire - Regulated Toxic Air Pollutants - Ambient Air Levels (AALs) - Annual  
U.S. - New Jersey - Discharge Prevention - List of Hazardous Substances  
U.S. - New Jersey - Environmental Hazardous Substances List  
RTK - U.S. - New Jersey - Right to Know Hazardous Substance List  
U.S. - New Jersey - Secondary Drinking Water Standards - Recommended Upper Limits (RULs)  
U.S. - New Jersey - Special Health Hazards Substances List  
U.S. - New Jersey - Water Quality - Ground Water Quality Criteria  
U.S. - New Jersey - Water Quality - Practical Quantitation Levels (PQLs)  
U.S. - New Mexico - Water Quality - Standards for Ground Water of 10,000 mg/L TDS Concentration or Less  
U.S. - New York - Occupational Exposure Limits - TWAs  
U.S. - New York - Reporting of Releases Part 597 - List of Hazardous Substances  
U.S. - North Dakota - Air Pollutants - Guideline Concentrations - 8-Hour  
U.S. - North Dakota - Hazardous Wastes - Maximum Concentration for the Toxicity Characteristic  
U.S. - North Dakota - Water Quality Standards - Aquatic Life Acute Value for Classes I, IA, II, III  
U.S. - Oregon - Permissible Exposure Limits - TWAs  
U.S. - California - Safer Consumer Products - Initial List of Candidate Chemicals and Chemical Groups  
U.S. - Pennsylvania - Drinking Water - Secondary Maximum Contaminant Levels (SMCLs)  
RTK - U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List  
RTK - U.S. - Pennsylvania - RTK (Right to Know) List  
U.S. - Rhode Island - Water Quality Standards - Acute Freshwater Aquatic Life Criteria  
U.S. - Rhode Island - Water Quality Standards - Acute Saltwater Aquatic Life Criteria  
U.S. - South Carolina - Secondary Maximum Contaminant Levels (SMCLs)  
U.S. - Tennessee - Occupational Exposure Limits - TWAs  
U.S. - Texas - Drinking Water Standards - Secondary Constituent Levels (SCLs)  
U.S. - Texas - Effects Screening Levels - Long Term  
U.S. - Texas - Effects Screening Levels - Short Term  
U.S. - Utah - Drinking Water - Secondary Maximum Contaminant Levels (SMCLs)  
U.S. - Vermont - Hazardous Waste - Hazardous Constituents  
U.S. - Vermont - Hazardous Waste - Maximum Contaminant Concentration for Toxicity  
U.S. - Vermont - Permissible Exposure Limits - TWAs  
U.S. - Virginia - Water Quality Standards - Acute Freshwater Aquatic Life  
U.S. - Virginia - Water Quality Standards - Acute Saltwater Aquatic Life  
U.S. - Washington - Dangerous Waste - Dangerous Waste Constituents List  
U.S. - Washington - Permissible Exposure Limits - STELs  
U.S. - Washington - Permissible Exposure Limits - TWAs  
U.S. - Alaska - Water Quality Standards - Acute Aquatic Life Criteria for Fresh Water  
U.S. - Alaska - Water Quality Standards - Acute Aquatic Life Criteria for Marine Water  
U.S. - Arkansas - Surface Water Quality Standards - Acute Aquatic Life Criteria

Silanamine, 1,1,1-trimethyl-N-(trimethylsilyl)-, hydrolysis products with silica (68909-20-6)

U.S. - Texas - Effects Screening Levels - Long Term

U.S. - Texas - Effects Screening Levels - Short Term

## SECTION 16: Other Information, Including Date of Preparation or Last Revision

Date of Preparation or Latest Revision 10/24/2022

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### Other Information

This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200.

### GHS Full Text Phrases:

|                   |  |
|-------------------|--|
| Aquatic Acute 1   | Hazardous to the aquatic environment - Acute Hazard Category 1   |
| Aquatic Chronic 3 | Hazardous to the aquatic environment - Chronic Hazard Category 3 |
| Carc. 2           | Carcinogenicity Category 2                                       |
| Comb. Dust        | Combustible Dust   |
| Skin Sens. 1      | Skin sensitization, Category 1                                   |
| STOT RE 1         | Specific target organ toxicity (repeated exposure) Category 1    |
| H317              | May cause an allergic skin reaction                              |
| H351              | Suspected of causing cancer                                      |
| H372              | Causes damage to organs through prolonged or repeated exposure   |
| H400              | Very toxic to aquatic life                                       |
| H412              | Harmful to aquatic life with long lasting effects                |

### NFPA Health Hazard

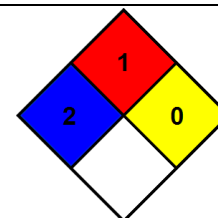
2 - Materials that, under emergency conditions, can cause temporary incapacitation or residual injury.

### NFPA Fire Hazard

1 - Materials that must be preheated before ignition can occur.

### NFPA Reactivity Hazard

0 - Material that in themselves are normally stable, even under fire conditions.



### HMIS III Rating

Health

2 Moderate Hazard =

Flammability

1 Slight Hazard

Physical

0 Minimal Hazard

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Nusil US GHS SDS

# R-2634 Part B

## Safety Data Sheet

According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations  
Revision Date: 10/24/2022 Date of Issue: 01/28/2014



Version 3.0

## SECTION 1: Identification

### 1.1. Product Identifier

Product Form Mixture  
Product Name R-2634 Part B  
Synonyms Curing Agent

### 1.2. Relevant Identified Uses of the Substance or Mixture and Uses Advised Against

Use of the Substance/Mixture For professional use only

### 1.3. Details of the Supplier of the Safety Data Sheet

NuSil Technology LLC  
1050 Cindy Lane  
Carpinteria, California 93013  
USA  
(805) 684-8780

[productstewardship@avantorsciencesgcc.com](mailto:productstewardship@avantorsciencesgcc.com)

[www.nusil.com](http://www.nusil.com)

### 1.4. Emergency Telephone Number

Emergency Number 800-424-9300 CHEMTREC (in US); +1 703-527-3887 CHEMTREC (International and Maritime)

## SECTION 2: Hazards Identification

### 2.1. Classification of the Substance or Mixture

#### GHS-US Classification

|  |      |
|--|------|
| Skin corrosion/irritation Category 2                             | H315 |
| Serious eye damage/eye irritation Category 1                     | H318 |
| Skin sensitization, Category 1                                   | H317 |
| Germ cell mutagenicity Category 2                                | H341 |
| Reproductive toxicity Category 1B                                | H360 |
| Specific target organ toxicity (single exposure) Category 1      | H370 |
| Specific target organ toxicity (repeated exposure) Category 1    | H372 |
| Hazardous to the aquatic environment - Acute Hazard Category 1   | H400 |
| Hazardous to the aquatic environment - Chronic Hazard Category 1 | H410 |

### 2.2. Label Elements

#### GHS-US Labeling

Hazard Pictograms (GHS-US)



GHS05



GHS07



GHS08



GHS09

Signal Word (GHS-US)

Danger

Hazard Statements (GHS-US)

H315 - Causes skin irritation  
H317 - May cause an allergic skin reaction  
H318 - Causes serious eye damage  
H341 - Suspected of causing genetic defects  
H360 - May damage fertility or the unborn child  
H370 - Causes damage to organs (thymus)  
H372 - Causes damage to organs (thymus) through prolonged

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### Precautionary Statements (GHS-US)

or repeated exposure  
H400 - Very toxic to aquatic life  
H410 - Very toxic to aquatic life with long lasting effects  
P201 - Obtain special instructions before use.  
P202 - Do not handle until all safety precautions have been read and understood.  
P260 - Do not breathe vapors, mist, or spray.  
P264 - Wash hands, forearms, and other exposed areas thoroughly after handling.  
P270 - Do not eat, drink or smoke when using this product.  
P272 - Contaminated work clothing must not be allowed out of the workplace.  
P273 - Avoid release to the environment.  
P280 - Wear protective gloves, protective clothing, and eye protection.  
P302+P352 - If on skin: Wash with plenty of soap and water.  
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 or doctor.  
P321 - Specific treatment (see section 4 on this SDS).  
P333+P313 - If skin irritation or rash occurs: Get medical advice/attention.  
P362+P364 - Take off contaminated clothing and wash it before reuse.  
P391 - Collect spillage.  
P405 - Store locked up.  
P501 - Dispose of contents/container in accordance with local, regional, national, and international regulations.

### 2.3. Other Hazards

Other Hazards Not Contributing to the Classification Exposure may aggravate pre-existing eye, skin, or respiratory conditions.

### 2.4. Unknown Acute Toxicity (GHS-US)

0% of the mixture consists of ingredients of unknown acute toxicity.

## SECTION 3: Composition/Information On Ingredients

### 3.1. Substances

Not applicable

### 3.2. Mixtures

| Name                 | Product Identifier | %*      | GHS-US Classification  |
|----------------------|--------------------|---------|--|
| Dibutyltin dilaurate | (CAS-No.) 77-58-7  | 30 - 60 | Skin Irrit. 2, H315<br>Eye Dam. 1, H318<br>Skin Sens. 1, H317<br>Muta. 2, H341<br>Repr. 1B, H360<br>STOT SE 1, H370<br>STOT RE 1, H372<br>Aquatic Acute 1, H400<br>Aquatic Chronic 1, H410 |



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Full text of H-phrases: see section 16

\*The specific chemical identity and/or exact percentage of composition have been withheld as a trade secret [29 CFR 1910.1200].

### SECTION 4: First Aid Measures

#### 4.1. Description of First-aid Measures

|                                       |   |
|---------------------------------------|---|
| First-aid Measures General            | Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).                                   |
| First-aid Measures After Inhalation   | When symptoms occur: go into open air and ventilate suspected area. Obtain medical attention if breathing difficulty persists.                                    |
| First-aid Measures After Skin Contact | Remove contaminated clothing. Wash affected area with soap and water for at least 15 minutes. Obtain medical attention if irritation/rash develops or persists.   |
| First-aid Measures After Eye Contact  | Immediately rinse with water for at least 30 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get immediate medical advice/attention. |
| First-aid Measures After Ingestion    | Rinse mouth. Do NOT induce vomiting. Obtain medical attention.  |

#### 4.2. Most Important Symptoms and Effects Both Acute and Delayed

|                                      |  |
|--------------------------------------|--|
| Symptoms/Injuries                    | Causes damage to organs (thymus). Causes damage to organs (thymus) through prolonged or repeated exposure. Causes serious eye damage. Causes skin irritation. Skin sensitization. Suspected of causing genetic defects. May damage fertility. May damage the unborn child. |
| Symptoms/Injuries After Inhalation   | Prolonged exposure may cause irritation.   |
| Symptoms/Injuries After Skin Contact | Redness, pain, swelling, itching, burning, dryness, and dermatitis. May cause an allergic skin reaction.   |
| Symptoms/Injuries After Eye Contact  | Causes permanent damage to the cornea, iris, or conjunctiva.   |
| Symptoms/Injuries After Ingestion    | Ingestion may cause adverse effects.   |
| Chronic Symptoms                     | Causes damage to organs (thymus) through prolonged or repeated exposure. Suspected of causing genetic defects. May damage fertility or the unborn child.   |

#### 4.3. Indication of Any Immediate Medical Attention and Special Treatment Needed

If exposed or concerned, get medical advice and attention. If medical advice is needed, have product container or label at hand.

### SECTION 5: Fire-Fighting Measures

#### 5.1. Extinguishing Media

|                                |   |
|--------------------------------|---|
| Suitable Extinguishing Media   | : Water spray, fog, carbon dioxide (CO <sub>2</sub> ), alcohol-resistant foam, or dry chemical. |
| Unsuitable Extinguishing Media | : Do not use a heavy water stream. Use of heavy stream of water may spread fire.                |

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#### 5.2. Special Hazards Arising From the Substance or Mixture

|                  |   |
|------------------|---|
| Fire Hazard      | Not considered flammable but may burn at high temperatures. |
| Explosion Hazard | Product is not explosive.                                   |
| Reactivity       | Hazardous reactions will not occur under normal conditions. |

#### 5.3. Advice for Firefighters

|                                |   |
|--------------------------------|---|
| Precautionary Measures Fire    | Exercise caution when fighting any chemical fire.   |
| Firefighting Instructions      | Use water spray or fog for cooling exposed containers.  |
| Protection During Firefighting | Do not enter fire area without proper protective equipment, including respiratory protection. |
| Hazardous Combustion Products  | Carbon oxides (CO, CO <sub>2</sub> ). Silicon oxides. Oxides of tin. Formaldehyde.            |
| Other Information              | Do not allow run-off from fire fighting to enter drains or water courses.                     |

### SECTION 6: Accidental Release Measures

#### 6.1. Personal Precautions, Protective Equipment And Emergency Procedures

|                  |   |
|------------------|---|
| General Measures | Do not breathe vapor, mist or spray. Do not get in eyes, on skin, or on clothing. |
|------------------|---|

##### 6.1.1. For Non-Emergency Personnel

|                      |  |
|----------------------|--|
| Protective Equipment | Use appropriate personal protective equipment (PPE). |
| Emergency Procedures | Evacuate unnecessary personnel.                      |

##### 6.1.2. For emergency responders

|                      |  |
|----------------------|--|
| Protective Equipment | Equip cleanup crew with proper protection.   |
| Emergency Procedures | Upon arrival at the scene, a first responder is expected to recognize the presence of dangerous goods, protect oneself and the public, secure the area, and call for the assistance of trained personnel as soon as conditions permit. Ventilate area. |

#### 6.2. Environmental Precautions

Prevent entry to sewers and public waters. Avoid release to the environment. Collect spillage.

#### 6.3. Methods and Materials for Containment and Cleaning Up

|                         |   |
|-------------------------|---|
| For Containment         | Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams.  |
| Methods for Cleaning Up | Clean up spills immediately and dispose of waste safely. Take up liquid spill into absorbent material. Transfer spilled material to a suitable container for disposal. Contact competent authorities after a spill. |

#### 6.4. Reference to Other Sections

See Section 8 for exposure controls and personal protection and Section 13 for disposal considerations.

### SECTION 7: Handling And Storage

#### 7.1. Precautions for Safe Handling

|                                   |   |
|-----------------------------------|---|
| Additional Hazards When Processed | Will decompose above 150 °C (> 300 °F) releasing formaldehyde vapors. |
|-----------------------------------|---|

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### Precautions for Safe Handling

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe vapors, mist, spray. Do not get in eyes, on skin, or on clothing. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

### Hygiene Measures

Handle in accordance with good industrial hygiene and safety procedures.

### 7.2. Conditions for Safe Storage, Including Any Incompatibilities

#### Technical Measures

Comply with applicable regulations.

#### Storage Conditions

Keep container closed when not in use. Store in a dry, cool place. Keep/Store away from direct sunlight, extremely high or low temperatures and incompatible materials. Store locked up/in a secure area.

#### Incompatible Materials

Strong acids, strong bases, strong oxidizers. Water.

### 7.3. Specific End Use(S)

For professional use only.

## SECTION 8: Exposure Controls/Personal Protection

### 8.1. Control Parameters

For substances listed in section 3 that are not listed here, there are no established exposure limits from the manufacturer, supplier, importer, or the appropriate advisory agency including: ACGIH (TLV), or OSHA (PEL).

| Tin organic compounds |                         |  |
|-----------------------|-------------------------|--|
| USA ACGIH             | ACGIH OEL TWA           | 0.1 mg/m <sup>3</sup>  |
| USA ACGIH             | ACGIH OEL STEL          | 0.2 mg/m <sup>3</sup>  |
| USA ACGIH             | ACGIH chemical category | Not Classifiable as a Human Carcinogen, Skin - potential significant contribution to overall exposure by the cutaneous route |
| USA NIOSH             | NIOSH REL (TWA)         | 0.1 mg/m <sup>3</sup> (except Cyhexatin)   |
| USA OSHA              | OSHA PEL (TWA) [1]      | 0.1 mg/m <sup>3</sup>  |

### 8.2. Exposure Controls

#### Appropriate Engineering Controls

Ensure adequate ventilation, especially in confined areas. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Ensure all national/local regulations are observed.

#### Personal Protective Equipment

Gloves. Protective clothing. Protective goggles. Insufficient ventilation: wear respiratory protection.



#### Materials For Protective Clothing

Chemically resistant materials and fabrics.

#### Hand Protection

Wear protective gloves.

#### Eye And Face Protection

Chemical safety goggles.

#### Skin And Body Protection

Wear suitable protective clothing.

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|                        |  |
|------------------------|--|
| Respiratory Protection | If exposure limits are exceeded or irritation is experienced, approved respiratory protection should be worn. In case of inadequate ventilation, oxygen deficient atmosphere, or where exposure levels are not known wear approved respiratory protection. |
| Other Information      | When using, do not eat, drink or smoke.  |

## SECTION 9: Physical and Chemical Properties

### 9.1. Information on Basic Physical and Chemical Properties

|                                       |                    |
|---------------------------------------|--------------------|
| Physical State                        | Liquid             |
| Appearance                            | Translucent Yellow |
| Odor                                  | Slight             |
| Odor Threshold                        | No data available  |
| pH                                    | No data available  |
| Evaporation Rate                      | No data available  |
| Melting Point                         | No data available  |
| Freezing Point                        | No data available  |
| Boiling Point                         | No data available  |
| Flash Point                           | > 135 °C (275 °F)  |
| Auto-ignition Temperature             | No data available  |
| Decomposition Temperature             | No data available  |
| Flammability                          | Not applicable     |
| Vapor Pressure                        | No data available  |
| Relative Vapor Density at 20°C        | No data available  |
| Relative Density                      | No data available  |
| Specific Gravity                      | > 1                |
| Solubility                            | No data available  |
| Partition Coefficient n-Octanol/Water | No data available  |
| Viscosity                             | No data available  |

### 9.2. Other Information

|             |      |
|-------------|------|
| VOC Content | <1 % |
|-------------|------|

## SECTION 10: Stability and Reactivity

### 10.1. Reactivity

Hazardous reactions will not occur under normal conditions.

### 10.2. Chemical Stability

Stable under recommended handling and storage conditions (see section 7).

### 10.3. Possibility of Hazardous Reactions

Hazardous polymerization will not occur.

### 10.4. Conditions to Avoid

Direct sunlight, extremely high or low temperatures, and incompatible materials.

### 10.5. Incompatible Materials

Strong acids, strong bases, strong oxidizers. Water.

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#### 10.6. Hazardous Decomposition Products

Thermal decomposition may produce: Carbon oxides (CO, CO<sub>2</sub>). Silicon oxides. Oxides of tin. Will decompose above 150 °C (>300° F) releasing formaldehyde vapors. Formaldehyde is a potential carcinogen and can act as a potential skin and respiratory sensitizer. Formaldehyde can also cause respiratory and eye irritation.

### SECTION 11: Toxicological Information

#### 11.1. Information on Toxicological Effects

|                             |                |
|-----------------------------|----------------|
| Acute Toxicity (Oral)       | Not classified |
| Acute Toxicity (Dermal)     | Not classified |
| Acute Toxicity (Inhalation) | Not classified |

|  |   |
|--|---|
| Dibutyltin dilaurate (77-58-7)                     |   |
| LD50 Dermal Rat                                    | > 2 g/kg  |
| Skin Corrosion/Irritation                          | Causes skin irritation.   |
| Serious Eye Damage/Irritation                      | Causes serious eye damage.  |
| Respiratory or Skin Sensitization                  | May cause an allergic skin reaction.  |
| Germ Cell Mutagenicity                             | Suspected of causing genetic defects.   |
| Carcinogenicity                                    | Not classified  |
| Reproductive Toxicity                              | May damage fertility or the unborn child.   |
| Specific Target Organ Toxicity (Single Exposure)   | Causes damage to organs (thymus).   |
| Specific Target Organ Toxicity (Repeated Exposure) | Causes damage to organs (thymus) through prolonged or repeated exposure.  |
| Aspiration Hazard                                  | Not classified  |
| Symptoms/Injuries After Inhalation                 | Prolonged exposure may cause irritation.  |
| Symptoms/Injuries After Skin Contact               | Redness, pain, swelling, itching, burning, dryness, and dermatitis. May cause an allergic skin reaction.  |
| Symptoms/Injuries After Eye Contact                | Causes permanent damage to the cornea, iris, or conjunctiva.  |
| Symptoms/Injuries After Ingestion                  | Ingestion may cause adverse effects.  |
| Chronic Symptoms                                   | Causes damage to organs through prolonged or repeated exposure. Suspected of causing genetic defects. May damage fertility or the unborn child. |

### SECTION 12: Ecological Information

#### 12.1. Toxicity

Ecology - General Very toxic to aquatic life with long lasting effects.

|                                |                            |
|--------------------------------|----------------------------|
| Dibutyltin dilaurate (77-58-7) |                            |
| EC50 - Crustacea [1]           | 0.463 mg/l (Daphnia magna) |

#### 12.2. Persistence and Degradability

|                               |   |
|-------------------------------|---|
| R-2634 Part B                 |   |
| Persistence and Degradability | May cause long-term adverse effects in the environment. |

#### 12.3. Bioaccumulative Potential

|               |  |
|---------------|--|
| R-2634 Part B |  |
|---------------|--|

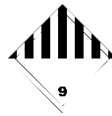


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Identification Number UN3082  
Hazard Class 9  
Label Codes 9  
ERG Code (IATA) 9L



### SECTION 15: Regulatory Information

#### 15.1. US Federal Regulations

All components in this mixture are listed on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory, have been exempted, are not listed, not disclosed due to CBI requirements or disclosure rules according to the relevant regulation.

|                                     |  |
|-------------------------------------|--|
| R-2634 Part B                       |  |
| SARA Section 311/312 Hazard Classes | Health hazard - Specific target organ toxicity (single or repeated exposure)<br>Health hazard - Respiratory or skin sensitization<br>Health hazard - Skin corrosion or Irritation<br>Health hazard - Germ cell mutagenicity<br>Health hazard - Reproductive toxicity<br>Health hazard - Serious eye damage or eye irritation |

#### 15.2. US State Regulations

|   |
|---|
| Dibutyltin dilaurate (77-58-7)  |
| U.S. - Texas - Effects Screening Levels - Long Term<br>U.S. - Texas - Effects Screening Levels - Short Term<br>U.S. - New Hampshire - Regulated Toxic Air Pollutants - Ambient Air Levels (AALs) - 24-Hour<br>U.S. - New Hampshire - Regulated Toxic Air Pollutants - Ambient Air Levels (AALs) - Annual<br>U.S. - California - Safer Consumer Products - Initial List of Candidate Chemicals and Chemical Groups   |
| Tin organic compounds (Not applicable)  |
| U.S. - Minnesota - Hazardous Substance List<br>U.S. - Tennessee - Occupational Exposure Limits - TWAs<br>U.S. - Tennessee - Occupational Exposure Limits - Skin Designations<br>U.S. - Vermont - Permissible Exposure Limits - TWAs<br>U.S. - Connecticut - Hazardous Air Pollutants - HLVs (8 hr)<br>U.S. - Vermont - Permissible Exposure Limits - Skin Designations<br>U.S. - Washington - Permissible Exposure Limits - TWAs<br>U.S. - Connecticut - Hazardous Air Pollutants - HLVs (30 min)<br>U.S. - Washington - Permissible Exposure Limits - STELs<br>U.S. - Washington - Permissible Exposure Limits - Skin Designations<br>U.S. - Idaho - Non-Carcinogenic Toxic Air Pollutants - Emission Levels (ELs)<br>U.S. - Idaho - Non-Carcinogenic Toxic Air Pollutants - Acceptable Ambient Concentrations<br>U.S. - New York - Occupational Exposure Limits - TWAs<br>U.S. - New York - Occupational Exposure Limits - Skin Designations<br>U.S. - Michigan - Occupational Exposure Limits - TWAs<br>U.S. - Michigan - Occupational Exposure Limits - Skin Designations<br>U.S. - Minnesota - Permissible Exposure Limits - Skin Designations<br>U.S. - Minnesota - Permissible Exposure Limits - TWAs<br>U.S. - Oregon - Permissible Exposure Limits - TWAs<br>U.S. - Texas - Effects Screening Levels - Long Term |

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U.S. - Texas - Effects Screening Levels - Short Term  
U.S. - Wisconsin - Hazardous Air Contaminants - All Sources - Emissions From Stack Heights 75 Feet or Greater  
U.S. - Wisconsin - Hazardous Air Contaminants - All Sources - Emissions From Stack Heights 40 Feet to Less Than 75 Feet  
U.S. - Wisconsin - Hazardous Air Contaminants - All Sources - Emissions From Stack Heights 25 Feet to Less Than 40 Feet  
U.S. - Wisconsin - Hazardous Air Contaminants - All Sources - Emissions From Stack Heights Less Than 25 Feet  
U.S. - North Dakota - Air Pollutants - Guideline Concentrations - 1-Hour  
U.S. - North Dakota - Air Pollutants - Guideline Concentrations - 8-Hour  
U.S. - New Hampshire - Regulated Toxic Air Pollutants - Ambient Air Levels (AALs) - 24-Hour  
U.S. - New Hampshire - Regulated Toxic Air Pollutants - Ambient Air Levels (AALs) - Annual

### SECTION 16: Other Information, Including Date of Preparation or Last Revision

Date of Preparation or Latest Revision 10/24/2022

Revision

Other Information

This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200.

GHS Full Text Phrases:

|                   |  |
|-------------------|--|
| Skin Irrit. 2     | Skin corrosion/irritation Category 2                             |
| Eye Dam. 1        | Serious eye damage/eye irritation Category 1                     |
| Skin Sens. 1      | Skin sensitization Category 1                                    |
| Muta. 2           | Germ cell mutagenicity Category 2                                |
| Repr. 1B          | Reproductive toxicity Category 1B                                |
| STOT SE 1         | Specific target organ toxicity (single exposure) Category 1      |
| STOT RE 1         | Specific target organ toxicity (repeated exposure) Category 1    |
| Aquatic Acute 1   | Hazardous to the aquatic environment - Acute Hazard Category 1   |
| Aquatic Chronic 1 | Hazardous to the aquatic environment - Chronic Hazard Category 1 |
| H315              | Causes skin irritation   |
| H317              | May cause an allergic skin reaction                              |
| H318              | Causes serious eye damage  |
| H341              | Suspected of causing genetic defects                             |
| H360              | May damage fertility or the unborn child                         |
| H370              | Causes damage to organs  |
| H372              | Causes damage to organs through prolonged or repeated exposure   |
| H400              | Very toxic to aquatic life                                       |
| H410              | Very toxic to aquatic life with long lasting effects             |



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NFPA Health Hazard

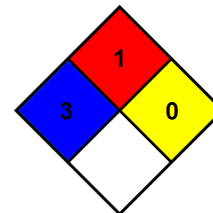
3 - Materials that, under emergency conditions, can cause serious or permanent injury.

NFPA Fire Hazard

1 - Materials that must be preheated before ignition can occur.

NFPA Reactivity Hazard

0 - Material that in themselves are normally stable, even under fire conditions.



HMIS III Rating  
Health

3 Serious Hazard

\* Chronic - Chronic (long-term) health effects may result from repeated overexposure

Flammability  
Physical

1 Slight Hazard

0 Minimal Hazard

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