CV-2510 Part A

Safety Data Sheet

According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations
Revision Date:: 02/23/2023 Date of Issue: 05/20/2014 Version 4.0

SECTION 1: Identification

1.1. Product Identifier

Product Form	Mixture
Product Name	CV-2510 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
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

Hazardous to the aquatic environment - Acute Hazard Category 2 H401
Hazardous to the aquatic environment - Chronic Hazard Category 2 H411

2.2. Label Elements

GHS-US Labeling

Hazard Pictograms (GHS-US)

GHS09

Hazard Statements (GHS-US)	H401 - Toxic to aquatic life H411 - Toxic to aquatic life with long lasting effects
Precautionary Statements (GHS-US)	P273 - Avoid release to the environment. 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)

65 - 85% 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
Zinc oxide (ZnO)	(CAS-No.) 1314-13-2	7 - 13	Aquatic Acute 1, H400 Aquatic Chronic 1, H410
Silanamine, 1,1,1-trimethyl-N-(trimethylsilyl)-, hydrolysis products with silica	(CAS-No.) 68909-20-6	7 - 13	Not classified

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 5 minutes. Obtain medical attention if irritation develops or persists.

First-aid Measures After Eye Contact: Rinse cautiously with water for at least 5 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain medical attention if irritation develops or persists.

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: Not expected to present a significant hazard under anticipated conditions of normal use.

Symptoms/Injuries After Inhalation: Prolonged exposure may cause irritation.

Symptoms/Injuries After Skin Contact: Prolonged exposure may cause skin irritation.

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

Symptoms/Injuries After Ingestion: Ingestion may cause adverse effects.

Chronic Symptoms: None expected under normal conditions of use.

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_2), 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: Carbon oxides (CO, CO_2). Silicon oxides. Nitrogen oxides. Zinc oxides. 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: Avoid prolonged contact with eyes, skin and clothing. Avoid breathing (vapor, mist, spray).

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. Absorb and/or contain spill with inert 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.
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)

Used as a sealing, caulking, adhesive or potting material in electronic and space applications. 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).

Zinc oxide (ZnO) (1314-13-2)		
USA ACGIH	ACGIH OEL TWA	2 mg/m³ (respirable particulate matter)
USA ACGIH	ACGIH OEL STEL	10 mg/m³ (respirable particulate matter)
USA NIOSH	NIOSH REL (TWA)	5 mg/m³ (dust and fume)
USA NIOSH	NIOSH REL (STEL)	10 mg/m³ (fume)
USA NIOSH	NIOSH REL (Ceiling)	15 mg/m³ (dust)
USA OSHA	OSHA PEL (TWA) [1]	5 mg/m³ (fume) 15 mg/m³ (total dust) 5 mg/m³ (respirable fraction)

Silanamine, 1,1,1-trimethyl-N-(trimethylsilyl)-, hydrolysis products with silica (68909-20-6)		
USA OSHA	OSHA PEL (TWA) [1]	6 mg/m³
USA OSHA	OSHA PEL (TWA) [2]	20 mppcf (80mg/m³/%SiO_2)

8.2. Exposure Controls

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

Personal Protective Equipment	Gloves. Protective clothing. Protective goggles or glasses.
	
Materials For Protective Clothing	Chemically resistant materials and fabrics.
Hand Protection	Wear protective gloves.
Eye And Face Protection	Chemical goggles or safety glasses.
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	White paste
Odor	Mild alcohol
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 (solid, gas)	Not applicable
Vapor Pressure	No data available
Relative Vapor Density at 20°C	No data available
Relative Density	1.2 (Water = 1)
Specific Gravity	1.2
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 may produce: Carbon oxides (CO, CO_2). Silicon oxides. Nitrogen oxides. Oxides of zinc. 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

Zinc oxide (ZnO) (1314-13-2)	
LD50 Oral Rat	> 5000 mg/kg
LD50 Dermal Rat	> 2000 mg/kg (no deaths)
LC50 Inhalation Rat	> 5700 mg/m³ (Exposure time: 4 h)

Skin Corrosion/Irritation	Not classified
Serious Eye Damage/Irritation	Not classified
Respiratory or Skin Sensitization	Not classified
Germ Cell Mutagenicity	Not classified
Carcinogenicity	Not classified
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	Prolonged exposure may cause skin irritation.
Symptoms/Injuries After Eye Contact	May cause slight irritation to eyes.
Symptoms/Injuries After Ingestion	Ingestion may cause adverse effects.
Chronic Symptoms	None expected under normal conditions of use.

SECTION 12: Ecological Information

12.1. Toxicity

Ecology - General	Toxic to aquatic life with long lasting effects.

Zinc oxide (ZnO) (1314-13-2)

LC50 Fish 1	970 µg/l (780 ug Zn/L; Exposure time: 96 h - Species: Pimephales promelas)
LC50 Fish 2	1.793 mg/l (Exposure time: 96 h - Species: Zebrafish)
NOEC Chronic Fish	0.026 mg/l (Species: Jordanella floridae)

12.2. Persistence and Degradability

CV-2510 Part A	
Persistence and Degradability	May cause long-term adverse effects in the environment.

12.3. Bioaccumulative Potential

CV-2510 Part A	
Bioaccumulative Potential	Not established.

12.4. Mobility In Soil

No additional information available

12.5. Other Adverse Effects

Other Information: Avoid release to the environment.

SECTION 13: Disposal Considerations

13.1. Waste Treatment Methods

Waste Disposal Recommendations: Dispose of contents/container in accordance with local, regional, national, and international regulations.

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. (Zinc Oxide)

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. (Zinc Oxide)
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. (Zinc Oxide)
Packing Group	III
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.

15.2. US State Regulations

Zinc oxide (ZnO) (1314-13-2)
RTK - U.S. - New Jersey - Right to Know Hazardous Substance List
RTK - U.S. - Pennsylvania - RTK (Right to Know) List
U.S. - Minnesota - Hazardous Substance List
RTK - U.S. - Massachusetts - Right To Know List
U.S. - Tennessee - Occupational Exposure Limits - STELs
U.S. - Tennessee - Occupational Exposure Limits - TWAs
U.S. - Vermont - Permissible Exposure Limits - TWAs
U.S. - Connecticut - Hazardous Air Pollutants - HLVs (8 hr)
U.S. - Vermont - Permissible Exposure Limits - STELs
U.S. - Washington - Permissible Exposure Limits - TWAs
U.S. - Connecticut - Hazardous Air Pollutants - HLVs (30 min)
U.S. - Washington - Permissible Exposure Limits - STELs
U.S. - Idaho - Non-Carcinogenic Toxic Air Pollutants - Emission Levels (ELs)
U.S. - Idaho - Non-Carcinogenic Toxic Air Pollutants - Acceptable Ambient Concentrations
U.S. - New York - Occupational Exposure Limits - TWAs
U.S. - Michigan - Occupational Exposure Limits - TWAs
U.S. - Michigan - Occupational Exposure Limits - STELs
U.S. - Minnesota - Permissible Exposure Limits - STELs
U.S. - Minnesota - Permissible Exposure Limits - TWAs
U.S. - Oregon - Permissible Exposure Limits - TWAs

U.S. - Texas - Effects Screening Levels - Long Term U.S. - Texas - Effects Screening Levels - Short Term RTK - U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List 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

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: 02/23/2023

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

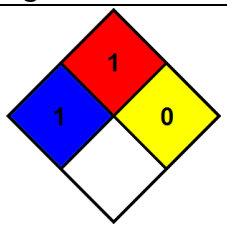
GHS Full Text Phrases:

H400	Very toxic to aquatic life
H401	Toxic to aquatic life
H410	Very toxic to aquatic life with long lasting effects
H411	Toxic to aquatic life with long lasting effects

NFPA Health Hazard: 1 - Materials that, under emergency conditions, can cause significant irritation.

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: 1 Slight Hazard

Flammability: 1 Slight Hazard

Physical: 0 Minimal Hazard

The information provided in this Safety Data Sheet (SDS) was prepared based on data believed to be accurate as of the date of this SDS. TO THE GREATEST EXTENT PERMITTED BY LAW, NUSIL TECHNOLOGY LLC AND ITS AFFILIATED COMPANIES ("NUSIL") EXPRESSLY DISCLAIMS ANY AND ALL REPRESENTATIONS AND WARRANTIES REGARDING THE INFORMATION CONTAINED HEREIN INCLUDING, WITHOUT LIMITATION, AS TO ACCURACY, COMPLETENESS, FITNESS FOR PURPOSE OR USE, MERCHANTABILITY, NON-INFRINGEMENT, PERFORMANCE, SAFETY, SUITABILITY AND STABILITY. This SDS is intended as a guide to the appropriate use, handling, storage and disposal of the product to which it relates by properly trained personnel, and is not intended to be comprehensive. Users of NuSil's products are advised to perform their own tests and to exercise their own judgment to determine the safety, suitability and appropriate use, handling, storage and disposal of each product and product combination for their own purposes and uses. TO THE GREATEST EXTENT PERMITTED BY LAW, NUSIL DISCLAIMS LIABILITY FOR, AND BY USING NUSIL'S PRODUCTS PURCHASER AGREES THAT UNDER NO CIRCUMSTANCES SHALL NUSIL BE LIABLE FOR, SPECIAL, INDIRECT, INCIDENTAL, PUNITIVE OR CONSEQUENTIAL DAMAGES OF ANY TYPE OR KIND, INCLUDING WITHOUT LIMITATION, FOR LOSS OF PROFITS, REPUTATIONAL DAMAGE, PRODUCT RECALL OR BUSINESS INTERRUPTION.

Nusil US GHS SDS

CV-2510 Part B

Safety Data Sheet

According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Revision Date: 02/23/2023 Date of Issue: 05/20/2014 Version 4.0

SECTION 1: Identification

1.1. Product Identifier

Product Form	Substance
Product Name	CV-2510 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
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

	or repeated exposure H400 - Very toxic to aquatic life H410 - Very toxic to aquatic life with long lasting effects
Precautionary Statements (GHS-US)	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

Name	Product Identifier	%*	GHS-US Classification
Dibutyltin dilaurate	(CAS-No.) 77-58-7	100	Skin Irrit. 2, H315 Eye Dam. 1, H318 Skin Sens. 1, H317 Muta. 2, H341 Repr. 1B, H360 STOT SE 1, H370 STOT RE 1, H372 Aquatic Acute 1, H400 Aquatic Chronic 1, H410

Full text of H-phrases: see section 16

3.2. Mixtures

Not applicable

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_2), 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	Refer to Section 9 for flammability properties.
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	Thermal decomposition may produce: Carbon oxides (CO, CO_2). Oxides of tin. When heated, material emits irritating and harmful fumes.

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.

7.3. Specific End Use(S)

For professional use only.

SECTION 8: Exposure Controls/Personal Protection

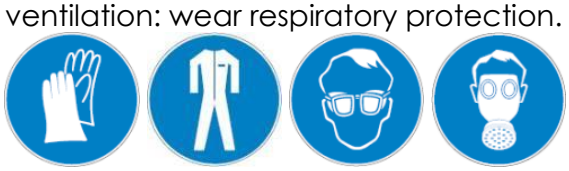
8.1. Control Parameters

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/m³
USA ACGIH	ACGIH OEL STEL	0.2 mg/m³
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/m³ (except Cyhexatin)
USA OSHA	OSHA PEL (TWA) [1]	0.1 mg/m³

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.

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.

10.6. Hazardous Decomposition Products

Thermal decomposition may produce: Carbon oxides (CO, CO_2). Oxides of tin. When heated, material emits irritating and harmful fumes.

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

CV-2510 Part B	
Persistence and Degradability	May cause long-term adverse effects in the environment.

12.3. Bioaccumulative Potential

CV-2510 Part B	
Bioaccumulative Potential	Not established.

Dibutyltin dilaurate (77-58-7)	
Partition coefficient n-octanol/water (Log Pow)	4.44

12.4. Mobility In Soil

No additional information available

12.5. Other Adverse Effects

Other Information: Avoid release to the environment.

SECTION 13: Disposal Considerations

13.1. Waste Treatment Methods

Waste Disposal Recommendations	Dispose of contents/container in accordance with local, regional, national, and international regulations.
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: Dibutyltin dilaurate)
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: Dibutyltin dilaurate)
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

14.3. In Accordance with IATA

Proper Shipping Name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Contains: Dibutyltin dilaurate)
Packing Group	III
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.

CV-2510 Part B	
SARA Section 311/312 Hazard Classes	Health hazard - Specific target organ toxicity (single or repeated exposure) Health hazard - Respiratory or skin sensitization Health hazard - Skin corrosion or Irritation Health hazard - Germ cell mutagenicity Health hazard - Reproductive toxicity 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 U.S. - Texas - Effects Screening Levels - Short Term 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. - California - Safer Consumer Products - Initial List of Candidate Chemicals and Chemical Groups

Tin organic compounds (Not applicable)
U.S. - Minnesota - Hazardous Substance List U.S. - Tennessee - Occupational Exposure Limits - TWAs U.S. - Tennessee - Occupational Exposure Limits - Skin Designations U.S. - Vermont - Permissible Exposure Limits - TWAs U.S. - Connecticut - Hazardous Air Pollutants - HLVs (8 hr) U.S. - Vermont - Permissible Exposure Limits - Skin Designations U.S. - Washington - Permissible Exposure Limits - TWAs U.S. - Connecticut - Hazardous Air Pollutants - HLVs (30 min) U.S. - Washington - Permissible Exposure Limits - STELs U.S. - Washington - Permissible Exposure Limits - Skin Designations U.S. - Idaho - Non-Carcinogenic Toxic Air Pollutants - Emission Levels (ELs) U.S. - Idaho - Non-Carcinogenic Toxic Air Pollutants - Acceptable Ambient Concentrations U.S. - New York - Occupational Exposure Limits - TWAs U.S. - New York - Occupational Exposure Limits - Skin Designations U.S. - Michigan - Occupational Exposure Limits - TWAs U.S. - Michigan - Occupational Exposure Limits - Skin Designations U.S. - Minnesota - Permissible Exposure Limits - Skin Designations U.S. - Minnesota - Permissible Exposure Limits - TWAs 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. - 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: 02/23/2023

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

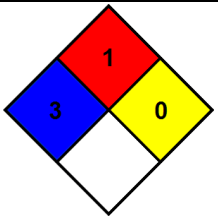
GHS Full Text Phrases:

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

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	1 Slight Hazard
Physical	0 Minimal Hazard

The information provided in this Safety Data Sheet (SDS) was prepared based on data believed to be accurate as of the date of this SDS. TO THE GREATEST EXTENT PERMITTED BY LAW, NUSIL TECHNOLOGY LLC AND ITS AFFILIATED COMPANIES ("NUSIL") EXPRESSLY DISCLAIMS ANY AND ALL REPRESENTATIONS AND WARRANTIES REGARDING THE INFORMATION CONTAINED HEREIN INCLUDING, WITHOUT LIMITATION, AS TO ACCURACY, COMPLETENESS, FITNESS FOR PURPOSE OR USE, MERCHANTABILITY, NON-INFRINGEMENT, PERFORMANCE, SAFETY, SUITABILITY AND STABILITY. This SDS is intended as a guide to the appropriate use, handling, storage and disposal of the product to which it relates by properly trained personnel, and is not intended to be comprehensive. Users of NuSil's products are advised to perform their own tests and to exercise their own judgment to determine the safety, suitability and appropriate use, handling, storage and disposal of each product and product combination for their own purposes and uses. TO THE GREATEST EXTENT PERMITTED BY LAW, NUSIL DISCLAIMS LIABILITY FOR, AND BY USING NUSIL'S PRODUCTS PURCHASER AGREES THAT UNDER NO CIRCUMSTANCES SHALL NUSIL BE LIABLE FOR, SPECIAL, INDIRECT, INCIDENTAL, PUNITIVE OR CONSEQUENTIAL DAMAGES OF ANY TYPE OR KIND, INCLUDING WITHOUT LIMITATION, FOR LOSS OF PROFITS, REPUTATIONAL DAMAGE, PRODUCT RECALL OR BUSINESS INTERRUPTION.

Nusil US GHS SDS