

Safety Data Sheet

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

Revision date: 10/07/2015

Date of issue: 09/17/2013

Version: 2.0

SECTION 1: Identification

1.1. Product identifier

Product form : Mixture
Product name : CV-1152
Synonyms : RTV Silicone Conformal Coating

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

Use of the substance/mixture : As a conformal coating for industrial or space applications that require low outgassing and minimal volatile condensables. 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
ehs@nusal.com
www.nusal.com

1.4. Emergency telephone number

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

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (GHS-US)

Eye Irrit. 2A H319
Skin Sens. 1 H317
Full text of H-phrases: see section 16

2.2. Label elements

GHS-US labeling

Hazard pictograms (GHS-US) :



GHS07

Signal word (GHS-US) : Warning

Hazard statements (GHS-US) : H317 - May cause an allergic skin reaction
H319 - Causes serious eye irritation

Precautionary statements (GHS-US) : P261 - Avoid breathing vapors, mist, or spray.
P264 - Wash hands, forearms, and exposed areas thoroughly after handling.
P272 - Contaminated work clothing must not be allowed out of the workplace.
P280 - Wear eye protection, protective clothing, protective gloves.
P302+P352 - If on skin: Wash with plenty of 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.
P321 - Specific treatment (see Section 4 on this SDS).
P333+P313 - If skin irritation or rash occurs: Get medical advice/attention.

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P337+P313 - If eye irritation persists: Get medical advice/attention.
P363 - Wash contaminated clothing before reuse.
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 those with 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. Substance

Not applicable

3.2. Mixture

Name	Product identifier	%	GHS-US classification
2-Butanone, O,O',O''-(methylsilyldiyl)trioxime	(CAS No) 22984-54-9	< 10	Eye Irrit. 2A, H319 Skin Sens. 1B, H317 STOT RE 2, H373
N-[3-(Trimethoxysilyl)propyl]-1,2-ethanediamine	(CAS No) 1760-24-3	< 1	Acute Tox. 4 (Inhalation:dust,mist), H332 Eye Dam. 1, H318 Skin Sens. 1, H317 Aquatic Acute 2, H401
Dibutyltin dilaurate	(CAS No) 77-58-7	< 0.2	Skin Corr. 1C, H314 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

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 if possible).
First-aid measures after inhalation : Remove to fresh air and keep at rest in a position comfortable for breathing. Obtain medical attention if breathing difficulty persists.
First-aid measures after skin contact : Rinse immediately with plenty of water. Obtain medical attention if irritation develops or persists.
First-aid measures after eye contact : Rinse cautiously with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain medical attention.
First-aid measures after ingestion : Do NOT induce vomiting. Rinse mouth. Immediately call a POISON CENTER or doctor/physician.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/injuries : Causes serious eye irritation. May cause an allergic skin reaction.
Symptoms/injuries after inhalation : May cause respiratory irritation.
Symptoms/injuries after skin contact : Causes skin irritation. May cause an allergic skin reaction.

Symptoms/injuries after eye contact	: Causes serious eye irritation.
Symptoms/injuries after ingestion	: Ingestion is likely to be harmful or have adverse effects.
Chronic symptoms	: None expected under normal conditions of use.

4.3. Indication of any immediate medical attention and special treatment needed

If you feel unwell, seek medical advice (show the label where possible).

SECTION 5: Fire-Fighting measures**5.1. Extinguishing media**

Suitable extinguishing media	: Use extinguishing media appropriate for surrounding fire.
Unsuitable extinguishing media	: Do not use a heavy water stream. Use of heavy stream of water may spread fire. Application of water stream to hot product may cause frothing and increase fire intensity.

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.
Other information	: Refer to Section 9 for flammability properties.

SECTION 6: Accidental release measures**6.1. Personal precautions, protective equipment and emergency procedures**

General measures	: Avoid all contact with skin, eyes, or clothing. Avoid breathing (vapor, mist, spray).
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6.1.1. For non-emergency personnel

Protective equipment	: Use appropriate personal protection equipment (PPE).
Emergency procedures	: Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment	: Equip cleanup crew with proper protection.
Emergency procedures	: Stop leak if safe to do so. Eliminate ignition sources. Ventilate area.

6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if product enters sewers or public waters.

6.3. Methods and material 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	: Clear up spills immediately and dispose of waste safely. Spills should be contained with mechanical barriers. Transfer spilled material to a suitable container for disposal. Contact competent authorities after a spill.

6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection.

SECTION 7: Handling and storage**7.1. Precautions for safe handling**

Hygiene measures	: Handle in accordance with good industrial hygiene and safety procedures. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.
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7.2. Conditions for safe storage, including any incompatibilities

- Technical measures : Comply with applicable regulations.
- Storage conditions : Store in a dry, cool and well-ventilated place. Keep container closed when not in use. Keep/Store away from direct sunlight, extremely high or low temperatures and incompatible materials.
- Incompatible products : Strong acids. Strong bases. Strong oxidizers.

7.3. Specific end use(s)

As a conformal coating for industrial or space applications that require low outgassing and minimal volatile condensables. 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), NIOSH (REL), or OSHA (PEL).

Tin organic compounds (RR-00042-0)		
USA ACGIH	ACGIH TWA (mg/m ³)	0.1 mg/m ³
USA ACGIH	ACGIH STEL (mg/m ³)	0.2 mg/m ³
USA ACGIH	ACGIH chemical category	Skin - potential significant contribution to overall exposure by the cutaneous route, Not Classifiable as a Human Carcinogen
USA OSHA	OSHA PEL (TWA) (mg/m ³)	0.1 mg/m ³

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 : Protective goggles. Gloves. Protective clothing.



- Materials for protective clothing : Chemically resistant materials and fabrics.
- Hand protection : Wear chemically resistant protective gloves.
- Eye protection : Chemical goggles or safety glasses.
- Skin and body protection : Wear suitable protective clothing.
- Respiratory protection : Use a NIOSH-approved respirator or self-contained breathing apparatus whenever exposure may exceed established Occupational Exposure Limits.
- Environmental exposure controls : Do not allow the product to be released into the environment.
- Consumer exposure controls : Do not eat, drink or smoke during use.
- 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
- Odor : None
- Odor threshold : No data available
- pH : No data available
- Evaporation Rate : No data available

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Melting point	: No data available
Freezing point	: No data available
Boiling point	: No data available
Flash point	: 280 °F (138 °C)
Auto-ignition Temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: No data available
Vapor pressure	: No data available
Relative vapor density at 20 °C	: No data available
Specific Gravity	: 1.11
Solubility	: No data available
Partition coefficient: n-octanol/water	: No data available
Viscosity	: No data available

9.2. Other information

No additional information available

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. Ignition sources. Incompatible materials.

10.5. Incompatible materials

Strong acids. Strong bases. Strong oxidizers.

10.6. Hazardous decomposition products

Carbon oxides (CO, CO₂). Silicon oxides.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified

2-Butanone, O,O',O''-(methylsilyldiyl)trioxime (22984-54-9)	
LD50 oral rat	2463 mg/kg
LD50 dermal rat	> 2000 mg/kg
N-[3-(Trimethoxysilyl)propyl]-1,2-ethanediamine (1760-24-3)	
LD50 oral rat	2295 mg/kg
LD50 dermal rabbit	> 2000 mg/kg
LC50 inhalation rat (Dust/Mist - mg/l/4h)	> 1,49 mg/l/4h
ATE CLP (dust,mist)	1,500 mg/l/4h
Dibutyltin dilaurate (77-58-7)	
LD50 dermal rat	> 2 g/kg
Skin corrosion/irritation	: Causes skin irritation.
Serious eye damage/irritation	: Causes serious eye irritation.
Respiratory or skin sensitization	: May cause an allergic skin reaction.
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified

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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	: May cause respiratory irritation.
Symptoms/injuries after skin contact	: Causes skin irritation. May cause an allergic skin reaction.
Symptoms/injuries after eye contact	: Causes serious eye irritation.
Symptoms/injuries after ingestion	: Ingestion is likely to be harmful or have adverse effects.

SECTION 12: Ecological information

12.1. Toxicity

2-Butanone, O,O',O''-(methylsilyldiyl)trioxime (22984-54-9)	
EC50 Daphnia 1	120 mg/l (Exposure time: 48h - Species: Daphnia magna)
N-[3-(Trimethoxysilyl)propyl]-1,2-ethanediamine (1760-24-3)	
LC50 fish 1	597 mg/l (Species: Danio rerio)
EC50 Daphnia 1	81 mg/l
ErC50 (algae)	8,8 mg/l (Exposure time: 72 h - Species: Pseudokirchneriella subcapitata)
NOEC chronic fish	344 mg/l
NOEC chronic crustacea	35 mg/l
NOEC chronic algae	3,1 mg/l (Pseudokirchnerella subcapitata Exposure time: 96h)
Dibutyltin dilaurate (77-58-7)	
EC50 Daphnia 1	0,463 mg/l (Daphnia magna)

12.2. Persistence and degradability

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Persistence and degradability	Not established.
Dibutyltin dilaurate (77-58-7)	
Persistence and degradability	Not readily biodegradable.

12.3. Bioaccumulative potential

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Bioaccumulative potential	Not established.
Dibutyltin dilaurate (77-58-7)	
Log Pow	4,44

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Other adverse effects

Other information : Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Sewage disposal recommendations : Do not empty into drains; dispose of this material and its container in a safe way.

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Waste disposal recommendations : Dispose of waste material in accordance with all local, regional, national, and international regulations.

SECTION 14: Transport information

In accordance with DOT / IMDG / IATA

14.1. UN number

Not applicable

14.2. UN proper shipping name

Not applicable

14.3. Additional information

Other information : No supplementary information available.

Transport by sea

No additional information available

Air transport

No additional information available

SECTION 15: Regulatory information

15.1. US Federal regulations

2-Butanone, O,O',O''-(methylsilyldiylne)trioxime (22984-54-9)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

N-[3-(Trimethoxysilyl)propyl]-1,2-ethanediamine (1760-24-3)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

Dibutyltin dilaurate (77-58-7)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

15.2. US State regulations

2-Butanone, O,O',O''-(methylsilyldiylne)trioxime (22984-54-9)

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

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

N-[3-(Trimethoxysilyl)propyl]-1,2-ethanediamine (1760-24-3)

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

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

Dibutyltin dilaurate (77-58-7)

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. - 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

Revision date : 10/07/2015

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

Full text of H-phrases:

Acute Tox. 4 (Inhalation:dust,mist)	Acute toxicity (inhalation:dust,mist) Category 4
Aquatic Acute 1	Hazardous to the aquatic environment - Acute Hazard Category 1

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Aquatic Acute 2	Hazardous to the aquatic environment - Acute Hazard Category 2
Aquatic Chronic 1	Hazardous to the aquatic environment - Chronic Hazard Category 1
Eye Dam. 1	Serious eye damage/eye irritation Category 1
Eye Irrit. 2A	Serious eye damage/eye irritation Category 2A
Muta. 2	Germ cell mutagenicity Category 2
Repr. 1B	Reproductive toxicity Category 1B
Skin Corr. 1C	Skin corrosion/irritation Category 1C
Skin Sens. 1	Skin sensitization Category 1
Skin Sens. 1B	Skin sensitization Category 1B
STOT RE 1	Specific target organ toxicity (repeated exposure) Category 1
STOT RE 2	Specific target organ toxicity (repeated exposure) Category 2
STOT SE 1	Specific target organ toxicity (single exposure) Category 1
H314	Causes severe skin burns and eye damage
H317	May cause an allergic skin reaction
H318	Causes serious eye damage
H319	Causes serious eye irritation
H332	Harmful if inhaled
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
H373	May cause damage to organs through prolonged or repeated exposure
H400	Very toxic to aquatic life
H401	Toxic to aquatic life
H410	Very toxic to aquatic life with long lasting effects

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NFPA health hazard

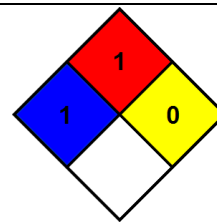
1 - Exposure could cause irritation but only minor residual injury even if no treatment is given.

NFPA fire hazard

1 - Must be preheated before ignition can occur.

NFPA reactivity

0 - Normally stable, even under fire exposure conditions, and are not reactive with water.



We believe that the information contained herein is current as of the date of this Safety Data Sheet, and is offered in good faith. Since the use of this information and of these opinions and the conditions of the use of the product are not within the control of NuSil Technology, it is the user's obligation to determine the conditions of safe use of the product.

Nusil US GHS SDS