



Safety Data Sheet

According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations Revision date: 11/22/2023 Date of Issue: 08/01/2014

Version 5.0

SECTION 1: Identification

1.1. Product Identifier

Product Form Mixture

Product Name CV3-1161 Part A Synonyms Silicone Adhesive

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

Number and Maritime)

SECTION 2: Hazards Identification

2.1. Classification of the Substance or Mixture

GHS-US Classification

Flammable liquids Category 2	H225
Acute toxicity (inhalation) Category 4	H332
Specific target organ toxicity — Single exposure, Category 3, Narcosis	H336
Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation	H335
Reproductive toxicity Category 2	H361
Hazardous to the aquatic environment - Chronic Hazard Category 3	H412

2.2. Label Elements

GHS-US Labeling

Hazard Pictograms (GHS-US)







GHS02 GHS07

GHS08

Signal Word (GHS-US) Danger

Hazard Statements (GHS-US) H225 - Highly flammable liquid and vapor

H332 - Harmful if inhaled.

H335 - May cause respiratory irritation H336 - May cause drowsiness or dizziness

H361 - Suspected of damaging fertility or the unborn child H412 - Harmful to aquatic life with long lasting effects

Precautionary Statements (GHS-

P201 - Obtain special instructions before use.

US)

P202 - Do not handle until all safety precautions have been

read and understood.

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P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P233 - Keep container tightly closed.

P240 - Ground/Bond container and receiving equipment.

P241 - Use explosion-proof electrical, ventilating, and lighting equipment.

P242 - Use only non-sparking tools.

P243 - Take precautionary measures against static discharge.

P261 - Avoid breathing vapors, mist, or spray.

P271 - Use only outdoors or in a well-ventilated area.

P273 - Avoid release to the environment.

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

P303+P361+P353 - If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

P304+P340 - If inhaled: Remove person to fresh air and keep at rest in a position comfortable for breathing.

P308+P313 - If exposed or concerned: Get medical advice/attention.

P312 - Call a poison center or doctor if you feel unwell.

P370+P378 - In case of fire: Use appropriate media (see section 5) to extinguish.

P403+P235 - Store in a well-ventilated place. Keep cool.

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. This material or its emissions may defat skin, cause contact dermatitis, or aggravate existing skin disease.

2.4. Unknown Acute Toxicity (GHS-US)

< 3% 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
tert-Butyl acetate	(CAS-No.) 540-88-5	60 - 70	Flam. Liq. 2, H225 Acute Tox. 4 (Inhalation:vapour), H332 STOT SE 3, H336 STOT SE 3, H335
Octamethylcyclotetrasiloxane	(CAS-No.) 556-67-2	< 0.25	Flam. Liq. 3, H226 Repr. 2, H361 Aquatic Chronic 1, H410

Full text of H-phrases: see section 16

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*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 When symptoms occur: go into open air and ventilate

Inhalation suspected area. Obtain medical attention if breathing difficulty

persists.

First-aid Measures After Skin Immediately remove contaminated clothing. Drench affected

Contact area with water for at least 15 minutes. Obtain medical

attention if irritation develops or persists.

First-aid Measures After Eye Rinse cautiously with water for at least 15 minutes. Remove

contact lenses, if present and easy to do. Continue rinsing. Obtain medical attention if irritation develops or persists.

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

Ingestion attention.

4.2. Most Important Symptoms and Effects Both Acute and Delayed

Symptoms/Injuries Harmful if inhaled. May cause respiratory irritation. May cause

drowsiness and dizziness. Suspected of damaging fertility or the

unborn child.

Symptoms/Injuries After Irritation of the respiratory tract and the other mucous

Inhalation membranes. High concentrations may cause central nervous

system depression such as dizziness, vomiting, numbness, drowsiness, headache, and similar narcotic symptoms.

Symptoms/Injuries After Skin

Contact

Contact

Symptoms/Injuries After Eye

Contact

Symptoms/Injuries After

Inaestion

Chronic Symptoms

Ingestion may cause adverse effects.

May cause slight irritation to eyes.

Prolonged exposure may cause skin irritation.

Repeated or prolonged skin contact may cause dermatitis and defatting. Suspected of damaging 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 : Dry chemical powder, alcohol-resistant foam, carbon dioxide

(CO₂). Water may be ineffective but water should be used to

keep fire-exposed container cool.

Unsuitable Extinguishing Media : Do not use a heavy water stream. A heavy water stream may

spread burning liquid.

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5.2. Special Hazards Arising From the Substance or Mixture

Fire Hazard Highly flammable liquid and vapor. Will float and can be

reignited on water surface. Vapors may travel to source of

ignition and flash back.

Explosion Hazard May form flammable or explosive vapor-air mixture.

Reactivity Reacts violently with strong oxidizers. Increased risk of fire or

explosion.

5.3. Advice for Firefighters

Precautionary Measures Fire Firefighting Instructions

Exercise caution when fighting any chemical fire.

Use water spray or fog for cooling exposed containers. In case

of major fire and large quantities: Evacuate area. Fight fire

remotely due to the risk of explosion.

Protection During Firefighting Do not enter fire area without proper protective equipment,

including respiratory protection.

Hazardous Combustion

Products

Carbon oxides (CO, CO₂). Silicon oxides. Formaldehyde.

SECTION 6: Accidental Release Measures

6.1. Personal Precautions, Protective Equipment And Emergency Procedures

General Measures Keep away from heat, hot surfaces, sparks, open flames, and

other ignition sources. No smoking. Use special care to avoid static electric charges. Avoid breathing (vapor, mist, spray). Do

not get in eyes, on skin, or on clothing.

6.1.1. For Non-Emergency Personnel

Protective Equipment Emergency Procedures Use appropriate personal protective equipment (PPE). Evacuate unnecessary personnel. Stop leak if safe to do so.

6.1.2. For emergency responders

Protective Equipment Emergency Procedures

Equip cleanup crew with proper protection.

Eliminate ignition sources first, then ventilate the area. 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.

6.2. Environmental Precautions

Prevent entry to sewers and public waters.

6.3. Methods and Materials for Containment and Cleaning Up

For Containment As an immediate precautionary measure, isolate spill or leak

area in all directions. 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

Clean up spills immediately and dispose of waste safely. Use only non-sparking tools. Absorb and/or contain spill with inert material. Do not take up in combustible material such as: saw

dust or cellulosic 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.

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Hygiene Measures

SECTION 7: Handling And Storage

7.1. Precautions for Safe Handling

Additional Hazards When Will decompose above 150 °C (> 300 °F) releasing

Processed formaldehyde vapors. Repeated or prolonged skin contact

may cause dermatitis and defatting. Handle empty containers

with care because residual vapors are flammable.

against static discharge. Avoid breathing vapors, mist, spray. Avoid prolonged contact with eyes, skin and clothing. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Handle in accordance with good industrial hygiene and safety

procedures.

7.2. Conditions for Safe Storage, Including Any Incompatibilities

Technical Measures Use explosion-proof electrical, ventilating, and lighting

equipment. Ground and bond container and receiving

equipment. Take action to prevent static discharges. Comply

with applicable regulations.

Storage Conditions 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. Store in a wellventilated place. Keep container tightly closed. Keep in

fireproof place.

Incompatible Materials Strong acids, strong bases, strong oxidizers. Nitrates. Water.

Alcohols. Metals. Attacks some forms of plastics, rubber, and

coatings.

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).

tert-Butyl acetate (540-88-5)			
USA ACGIH	ACGIH OEL TWA [ppm]	50 ppm (Butyl acetates, all isomers)	
USA ACGIH	ACGIH OEL STEL [ppm]	150 ppm (Butyl acetates, all isomers)	
USA NIOSH	NIOSH REL (TWA)	950 mg/m³	
USA NIOSH	NIOSH REL TWA [ppm]	200 ppm	
USA OSHA	OSHA PEL (TWA) [1]	950 mg/m³	
USA OSHA	OSHA PEL (TWA) [2]	200 ppm	
Octamethylcyclotetrasiloxane (556-67-2)			
USA AIHA	WEEL TWA	10 ppm	

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8.2. Exposure Controls

Appropriate Engineering Controls

Ensure adequate ventilation, especially in confined areas. Use explosion-proof equipment. Proper grounding procedures to avoid static electricity should be followed. Gas detectors should be used when flammable gases or vapors may be released. 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

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









Materials For Protective

Clothing

Hand Protection

Eye And Face Protection Skin And Body Protection Respiratory Protection Chemically resistant materials and fabrics. Wear fire/flame resistant/retardant clothing.

Wear protective gloves.

Chemical safety goggles or safety glasses with side shields. Wear suitable protective clothing.

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 Colorless
Odor Odorless

Odor Threshold No data available На No data available **Evaporation Rate** No data available **Melting Point** No data available Freezing Point No data available **Boiling Point** 98 °C (208 °F) Flash Point 4 °C (39.2 °F) **Auto-ignition Temperature** 518 °C (964 °F) **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
Partition Coefficient n-Octanol/Water
Viscosity

No data available
No data available
No data available

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9.2. Other Information

VOC Content 60-70 %

SECTION 10: Stability and Reactivity

10.1. Reactivity

Reacts violently with strong oxidizers. Increased risk of fire or explosion.

10.2. Chemical Stability

Highly flammable liquid and vapor. May form flammable or explosive vapor-air mixture.

10.3. Possibility of Hazardous Reactions

Hazardous polymerization will not occur.

10.4. Conditions to Avoid

Direct sunlight, extremely high or low temperatures, heat, hot surfaces, sparks, open flames, incompatible materials, and other ignition sources.

10.5. Incompatible Materials

Strong acids, strong bases, strong oxidizers. Nitrates. Water. Alcohols. Metals. Attacks some forms of plastics, rubber, and coatings.

10.6. Hazardous Decomposition Products

Thermal decomposition may produce: Carbon oxides (CO, CO₂). Silicon oxides. 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)

Acute Toxicity (Dermal)

Acute Toxicity (Inhalation)

Not classified

Not classified

Harmful if inhaled.

tert-Butyl acetate (540-88-5)		
LD50 Oral Rat	4500 mg/kg	
LD50 Dermal Rabbit	> 2000	
LC50 Inhalation Rat	> 9482 mg/m³ (Exposure time: 4 h)	
Octamethylcyclotetrasiloxane (556-67-2)		
LD50 Oral Rat	> 4800 mg/kg (No mortality)	
LD50 Dermal Rat	> 2375 mg/kg	
LD50 Dermal Rabbit	> 2.5 ml/kg (No mortality)	
LC50 Inhalation Rat	36 mg/l/4h	

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

Suspected of damaging fertility or the unborn child.

May cause drowsiness or dizziness. May cause respiratory

(Single Exposure) irritation.

Specific Target Organ Toxicity Not classified

(Repeated Exposure)

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Aspiration Hazard Not classified

Symptoms/Injuries After Irritation of the respiratory tract and the other mucous

Inhalation membranes. High concentrations may cause central nervous

system depression such as dizziness, vomiting, numbness,

drowsiness, headache, and similar narcotic symptoms.

Prolonged exposure may cause skin irritation.

Symptoms/Injuries After Skin

Contact

Symptoms/Injuries After Eye

Contact

May cause slight irritation to eyes.

Symptoms/Injuries After

Ingestion

Ingestion may cause adverse effects.

Chronic Symptoms Repeated or prolonged skin contact may cause dermatitis and defatting. Suspected of damaging fertility or the unborn child.

SECTION 12: Ecological Information

12.1. Toxicity

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

tert-Butyl acetate (540-88-5)		
LC50 Fish 1 296 – 362 mg/l (Exposure time: 96 h - Species: Pimephales		
	promelas [flow-through])	
Octamethylcyclotetrasiloxane (556-67-2)		
LC50 Fish > 22 μg/l		
NOEC Chronic Fish	0.0044 mg/l	

12.2. Persistence and Degradability

<u> </u>	~~····
CV3-1161 Part A	
Persistence and Degradability	May cause long-term adverse effects in the environment.

12.3. Bioaccumulative Potential

CV3-1161 Part A	
Bioaccumulative Potential	Not established.
tert-Butyl acetate (540-88-5)	
Partition coefficient n-	1.64 (at 21.7 °C (at pH 5)
octanol/water (Log Pow)	
Octamethylcyclotetrasiloxane (5	556-67-2)
BCF Fish 1	(12400 dimensionless)
Partition coefficient n-	6.488 (at 25.1 °C)
octanol/water (Log Pow)	

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 Dispose of contents/container in accordance with local,

Recommendations regional, national, and international regulations.

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Additional Information Handle empty containers with care because residual vapors

are flammable.

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 BUTYL ACETATES MIXTURE

Hazard Class 3

Identification Number UN1123

Label Codes 3
Packing Group II
ERG Number 129



14.2. In Accordance with IMDG

Proper Shipping Name BUTYL ACETATES MIXTURE

Hazard Class 3

Identification Number UN1123

Packing Group || Label Codes 3
EmS-No. (Fire) F-E
EmS-No. (Spillage) S-D



14.3. In Accordance with IATA

Proper Shipping Name BUTYL ACETATES MIXTURE

Packing Group ||

Identification Number UN1123

Hazard Class 3 Label Codes 3 ERG Code (IATA) 3L



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.

CV3-1161 Part A		
SARA Section 311/312 Hazard Health hazard - Specific target organ toxicity (single or repea		
Classes exposure)		
Health hazard - Reproductive toxicity		
Physical hazard - Flammable (gases, aerosols, liquids, or solid		
tert-Butyl acetate (540-88-5)		
CERCLA RQ	5000 lb listed under Butyl acetate	

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15.2. US State Regulations

tert-Butyl acetate (540-88-5)

- 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. New Jersey Special Health Hazards Substances List
- U.S. New York Reporting of Releases Part 597 List of Hazardous Substances
- U.S. Tennessee Occupational Exposure Limits TWAs
- U.S. Massachusetts Toxics Use Reduction Act
- U.S. Vermont Permissible Exposure Limits TWAs
- U.S. Connecticut Hazardous Air Pollutants HLVs (8 hr)
- 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. Delaware Volatile Organic Compounds Exempt from Requirements
- 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. Minnesota Permissible Exposure Limits TWAs
- U.S. Massachusetts Oil & Hazardous Material List Reportable Quantity
- U.S. Massachusetts Oil & Hazardous Material List Soil Reportable Concentration Reporting Category 2
- U.S. Massachusetts Oil & Hazardous Material List Groundwater Reportable Concentration Reporting Category 2
- U.S. Massachusetts Oil & Hazardous Material List Groundwater Reportable Concentration Reporting Category 1
- U.S. Massachusetts Oil & Hazardous Material List Soil Reportable Concentration Reporting Category 1
- U.S. Delaware Pollutant Discharge Requirements Reportable Quantities
- U.S. New Jersey Discharge Prevention List of Hazardous Substances
- 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. Michigan Polluting Materials List
- RTK U.S. Pennsylvania RTK (Right to Know) Environmental Hazard List
- U.S. California SDAPCD Toxic Air Contaminants Carcinogenic Impacts Must Be Calculated
- U.S. North Dakota Air Pollutants Guideline Concentrations 8-Hour
- U.S. Massachusetts Volatile Organic Compounds Exempt From Requirements

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

Date of Preparation or Latest

11/22/2023

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:

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Flam. Liq. 2	Flammable liquids Category 2	
Flam. Liq. 3	Flammable liquids Category 3	
Acute Tox. 4 (Inhalation:vapour)	Acute toxicity (inhalation) Category 4	
STOT SE 3	Specific target organ toxicity (single exposure) Category 3	
Repr. 2	Reproductive toxicity Category 2	
Aquatic Chronic 1	Hazardous to the aquatic environment - Chronic Hazard Category 1	
Aquatic Chronic 3	Hazardous to the aquatic environment - Chronic Hazard Category 3	
H225	Highly flammable liquid and vapor	
H226	Flammable liquid and vapor	
H332	Harmful if inhaled	
H335	May cause respiratory irritation	
H336	May cause drowsiness or dizziness	
H361	Suspected of damaging fertility or the unborn child	
H410	Very toxic to aquatic life with long lasting effects	
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 3 - Liquids and solids (including finely

divided suspended solids) that can be

ignited under almost all ambient

temperature conditions.

NFPA Reactivity Hazard 0 - Material that in themselves are

normally stable, even under fire

conditions.

HMIS III Rating

Health 2 Moderate Hazard

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

repeated overexposure

Flammability 3 Serious Hazard
Physical 0 Minimal Hazard

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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.

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Version 5.0

SECTION 1: Identification

Product Identifier 1.1.

Product Form Mixture

CV3-1161 Part B Product Name Synonyms Silicone Adhesive

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

Use of the Substance/Mixture For professional use only.

Details of the Supplier of the Safety Data Sheet 1.3.

NuSil Technology LLC 1050 Cindy Lane

Carpinteria, California 93013

USA

(805) 684-8780

productstewardship@avantorsciencesgcc.com

www.nusil.com

1.4. **Emergency Telephone Number**

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

Number and Maritime)

SECTION 2: Hazards Identification

Classification of the Substance or Mixture 2.1.

GHS-US Classification

Organic Peroxide Category D H242 Skin sensitization, Category 1 H317 Reproductive toxicity Category 1B H360 Hazardous to the aquatic environment - Chronic Hazard Category 3 H412

2.2. **Label Elements**

GHS-US Labeling

Hazard Pictograms (GHS-US)







GHS02

GHS07

GHS08

Signal Word (GHS-US)

Danger

Hazard Statements (GHS-US) H242 - Heating may cause a fire.

> H317 - May cause an allergic skin reaction H360 - May damage fertility or the unborn child

H412 - Harmful 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.

P210 - Keep away from extremely high or low temperatures,

ignition

sources, and incompatible materials. - No smoking.

P220 - Keep/Store away from combustible material, oxidizable

11/22/2023 EN (English US) materials, and incompatible materials.

P234 - Keep only in original container.

P261 - Avoid breathing vapors, mist, or spray.

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 water.

P308+P313 - If exposed or concerned: Get medical advice/attention.

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

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

P363 - Wash contaminated clothing before reuse.

P405 - Store locked up.

P410 - Protect from sunlight.

P411+P235 - Store at temperatures not exceeding 30°C/86°F. Keep cool.

P420 - Store away from other materials.

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
2,4-Dichlorobenzoyl peroxide	(CAS-No.) 133-14-2	45-55	Org. Perox. D, H242 Skin Sens. 1, H317 Repr. 1B, H360
Octamethylcyclotetrasiloxane	(CAS-No.) 556-67-2	< 0.25	Flam. Liq. 3, H226 Repr. 2, H361 Aquatic Chronic 1, H410

Full text of H-phrases: see section 16

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^{*}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 When symptoms occur: go into open air and ventilate

Inhalation 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

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 Rinse mouth. Do NOT induce vomiting. Obtain medical

Ingestion attention.

4.2. Most Important Symptoms and Effects Both Acute and Delayed

Symptoms/Injuries Skin sensitization. May damage fertility or the unborn child.

Symptoms/Injuries After Prolonged exposure may cause irritation.

Inhalation

Symptoms/Injuries After Skin

Contact

Symptoms/Injuries After Eye

Contact

Symptoms/Injuries After

Ingestion

Ingestion may cause adverse effects.

May cause an allergic skin reaction.

May cause slight irritation to eyes.

Chronic Symptoms May damage fertility or the unborn child. May cause an allergic

skin reaction.

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 (CO₂), 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 Heating may cause a fire.

Explosion Hazard Peroxides and their decomposition products can be

flammable, can ignite when heated, and explode under confinement. Will support combustion under fire conditions.

Reactivity This material contains an organic peroxide. Heating may cause

hazardous decomposition. Hazardous decomposition products from peroxides are flammable and can be explosive under

confinement.

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5.3. **Advice for Firefighters**

Precautionary Measures Fire Exercise caution when fighting any chemical fire.

Firefighting Instructions DO NOT fight fire when fire reaches explosives, evacuate area. Protection During Firefighting Do not enter fire area without proper protective equipment,

including respiratory protection.

Hazardous Combustion Carbon oxides (CO, CO2). PCB (polychlorinated biphenyls). **Products**

Furan. 2,4-Dichlorobenzoic acid. 1,3-dichlorbenzene. 2,2',4,4'-

Tetrachlorobiphenyl.

Other Information Contains an organic peroxides keep away from incompatible

materials.

SECTION 6: Accidental Release Measures

Personal Precautions, Protective Equipment And Emergency Procedures 6.1.

General Measures Do not get in eyes, on skin, or on clothing. Do not breathe

> vapor, mist or spray. Keep away from heat, hot surfaces, sparks, open flames, incompatible materials, combustible materials,

and other ignition sources. No smoking.

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.

Environmental Precautions 6.2.

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

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. Use only non-sparking tools.

Clean up spills immediately and dispose of waste safely. Methods for Cleaning Up

Absorb and/or contain spill with inert material. Transfer spilled

material to a suitable container for disposal. Contact

competent authorities after a spill.

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

This material contains an organic peroxide. Heating may cause hazardous decomposition. Hazardous decomposition products from peroxides are flammable and can be explosive under

confinement.

11/22/2023 EN (English US) Precautions for Safe Handling Obtain special instructions before use. Do not handle until all

safety precautions have been read and understood. Avoid contact with skin, eyes and clothing. Do not breathe vapors, mist, spray. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when

leaving work. Keep away from heat, ignition sources,

combustible materials, incompatible materials, direct sunlight. -

No smoking.

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. Proper grounding

procedures to avoid static electricity should be followed. Use explosion-proof electrical, ventilating, and lighting equipment. 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 Acids. Bases. Rust. Iron. Copper. Heavy metals. Reducing

agents. Peroxides.

7.3. Specific End Use(S)

For professional use only.

Storage Conditions

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).

Octamethylcyclotetra	siloxane (556-67-2)	
USA AIHA	WEEL TWA	10 ppm

8.2. Exposure Controls

Appropriate Engineering Ensure adequate ventilation, especially in confined areas.

Controls Suitable eye/body wash equipment should be available in the

vicinity of any potential exposure. Ensure all national/local regulations are observed. Proper grounding procedures to avoid static electricity should be followed. Use explosion-proof

equipment.

Personal Protective Equipment Gloves. Protective clothing. Insufficient ventilation: wear

respiratory protection. Protective goggles or glasses.









Materials For Protective Clothing

Hand Protection

Eye And Face Protection Skin And Body Protection Chemically resistant materials and fabrics. Wear fire/flame resistant/retardant clothing.

Wear protective gloves.

Chemical safety goggles or safety glasses with side shields.

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 Solid

Appearance White to off-white paste

Odor Slight

Odor Threshold No data available На 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 No data available

Specific Gravity 1.25

Solubility
Partition Coefficient n-Octanol/Water
Viscosity
No data available
No data available
No data available

9.2. Other Information

VOC Content < 1 %

SECTION 10: Stability and Reactivity

10.1. Reactivity

This material contains an organic peroxide. Heating may cause hazardous decomposition. Hazardous decomposition products from peroxides are flammable and can be explosive under confinement.

10.2. Chemical Stability

Heating may cause a fire.

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. Sparks, heat, open flame, combustible materials, organic material and other sources of ignition.

10.5. Incompatible Materials

Acids. Bases. Rust. Iron. Copper. Heavy metals. Reducing agents. Peroxides.

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10.6. Hazardous Decomposition Products

Thermal decomposition generates: Carbon oxides (CO, CO2). PCB (polychlorinated biphenyls). Furan. 2,4-Dichlorobenzoic acid. 1,3-dichlorbenzene. 2,2',4,4'-Tetrachlorobiphenyl.

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

1 2 1-1 ichlorobenzovi perovide i 13	33-14-2)
LD50 Oral Rat	> 2500 mg/kg

Octamethylcyclotetrasiloxane	e (556-67-2)
LD50 Oral Rat	> 4800 mg/kg (No mortality)
LD50 Dermal Rat	> 2375 mg/kg
LD50 Dermal Rabbit	> 2.5 ml/kg (No mortality)
LC50 Inhalation Rat	36 mg/l/4h

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

Reproductive Toxicity May damage fertility or the unborn child. Not classified

Specific Target Organ Toxicity

(Single Exposure)

Not classified

Specific Target Organ Toxicity (Repeated Exposure)

Aspiration Hazard Not classified

Symptoms/Injuries After

Inhalation

Prolonged exposure may cause irritation.

Symptoms/Injuries After Skin

Contact

Symptoms/Injuries After Eye

Contact

Ingestion

Symptoms/Injuries After Ingestion may cause adverse effects.

May cause an allergic skin reaction.

May cause slight irritation to eyes.

Chronic Symptoms May damage fertility or the unborn child. May cause an

allergic skin reaction.

SECTION 12: Ecological Information

12.1. Toxicity

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

2,4-Dichlorobenzoyl peroxide (133-14-2)	
LC50 Fish 1	> 1000 mg/l (Exposure time: 96 h - Species: Poecilia reticulata
	[semi-static])

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NOEC Chronic Fish	1000 mg/l (Exposure: 96h Species: Poecilia reticulata [semi-	
	static])	
Octamethylcyclotetrasiloxane (556-67-2)		
LC50 Fish 1	> 22 µg/l	
NOEC Chronic Fish	0.0044 mg/l	

12.2. Persistence and Degradability

CV3-1161 Part B	
Persistence and Degradability	May cause long-term adverse effects in the environment.

12.3. Bioaccumulative Potential

CV3-1161 Part B	
Bioaccumulative Potential	Not established.
2,4-Dichlorobenzoyl peroxide (133-14-2)	
Partition coefficient n-	6.01 KowWin
octanol/water (Log Pow)	
Octamethylcyclotetrasiloxane (556-67-2)	
BCF Fish 1	(12400 dimensionless)
Partition coefficient n-	6.488 (at 25.1 °C)
octanol/water (Log Pow)	

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 Dispose of contents/container in accordance with local,

Recommendations 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 ORGANIC PEROXIDE TYPE D, SOLID (2,4-Dichlorobenzoyl peroxide)

Hazard Class 5.2
Identification Number UN3106
Label Codes 5.2
Packing Group II
ERG Number 145

14.2. In Accordance with IMDG

Proper Shipping Name ORGANIC PEROXIDE TYPE D, SOLID (2,4-Dichlorobenzoyl peroxide)

Hazard Class 5.2 Division 5.2

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Identification NumberUN3106Label Codes5.2EmS-No. (Fire)F-JEmS-No. (Spillage)S-RMFAG Number145



14.3. In Accordance with IATA

Proper Shipping Name ORGANIC PEROXIDE TYPE D, SOLID (2,4-Dichlorobenzoyl peroxide)

Identification NumberUN3106Hazard Class5.2Label Codes5.2Division5.2ERG Code (IATA)5L



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.

CV3-1161 Part B	
SARA Section 311/312 Hazard	Physical hazard - Organic peroxide
Classes	Health hazard - Respiratory or skin sensitization
	Health hazard - Reproductive toxicity

15.2. US State Regulations

Octamethylcyclotetrasiloxane (556-67-2)

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

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

U.S. - Maine - Chemicals of Concern

U.S. - Oregon - Priority Persistent Pollutant - Tier I - Persistent Pollutants

U.S. - Minnesota - Chemicals of High Concern

U.S. - Minnesota - Chemicals of High Concern - Persistent Bioaccumulative Toxins

U.S. - California - Safer Consumer Products - Initial List of Candidate Chemicals and Chemical Groups

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

Date of Preparation or Latest 11/22/2023

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:

H226	Flammable liquid and vapor	
H242	Heating may cause a fire.	
H317	May cause an allergic skin reaction	
H360	May damage fertility or the unborn child	
H361	Suspected of damaging fertility or the unborn child	
H410	Very toxic to aquatic life with long lasting effects	

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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. 	2 2
NFPA Fire Hazard	 2 - Materials that must be moderately heated or exposed to relatively high ambient temperatures before ignition can occur. 	

NFPA Reactivity Hazard

: 2 - Materials that readily undergo violent chemical change at elevated temperatures

and pressures.

HMIS III Rating

Health : 2 Moderate Hazard - Temporary or minor injury may occur

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

repeated overexposure

Flammability : 2 Moderate Hazard Physical : 2 Moderate Hazard

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