

1. Identification

Product Identifier: WSSILCLR, WSSILWHT, WSSILTRANS
Use: Silicone sealant
Manufacturer: CSL Silicones Inc.
144 Woodlawn Road West, Guelph, ON, N1H 1B5
Canada
Manufacturer Phone: North America: 1.800.265.2753 Worldwide: +1 519.836.9044
Emergency Phone: +1 519.836.9044 Monday – Friday, 8:00 A.M. – 5:00 P.M. Eastern Time Zone, UTC-05:00
Emergency Contact: Baz Mistry, Laboratory Manager; Farooq Ahmed, R&D Manager

2. Hazards Identification

GHS Hazard Classification: Acute Toxicity – Category 4
Skin Irritation – Category 3

GHS Hazard Symbols:



GHS Signal Word: Warning

GHS Hazard Statements: H302 – Harmful if swallowed.
H316 – Causes mild skin irritation.

GHS Precautionary Statements:

Prevention: P260 – Do not breathe fumes/vapours.
P271 – Use only outdoors or in a well ventilated area.
P273 – Avoid release to the environment.
P281 – Use protective equipment as required.

Response: P302+P352 – IF ON SKIN: Wash with plenty of water.
P305+P351+P338 – IF IN EYES: Rinse cautiously for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Storage: P403+P233+P235 – Store in a well ventilated place. Keep container tightly closed. Keep cool.

Disposal: P501 – Dispose of contents/container to waste in accordance with local/regional/national/international regulations.

Other Hazards which do not result in GHS classification: Not applicable.

3. Composition / Information on Ingredients

Chemical Name	Common or Other Name	CAS Number	Percent by Weight
Silicon dioxide	Silica, amorphous	7631-86-9	5 -10
Diacetyl-di-tert-butyl orthosilicate	Diacetoxydi-tert-butoxysilane	13170-23-5	1 - 5
Ethylsilanetriyltriacetate	Triacetoxyethylsilane	17689-77-9	1 - 5
Other Ingredients			Conc

Ingredients not precisely identified are proprietary or non-hazardous. Values are not product specifications.

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

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

4. First Aid Information

IF POISONING IS SUSPECTED, immediately contact the poison control center, doctor or nearest hospital. Have the product container, label or Safety Data Sheet with you when calling CSL Silicones Inc., a poison control center or doctor, or going for treatment. Tell the person contacted the complete product name, and the type and amount of exposure. Describe any symptoms and follow the advice given.

Inhalation: The affected person should be moved to fresh air and made comfortable. Obtain medical attention as a precaution.

Eye Contact: Do not attempt to remove solids or gums from the eye. Immediately flush the contaminated eye(s) with lukewarm, gently flowing water for 20 minutes, holding the eyelids open. After 5 minutes, remove contact lenses if present and possible, and continue rinsing. Obtain medical attention immediately.

Skin Contact: Remove contaminated clothing. Wash gently and thoroughly with water and non-abrasive soap. If symptoms persist, obtain medical attention. Contaminated clothing should be laundered before re-use.

Ingestion: Never give anything by mouth if victim is rapidly losing consciousness, is unconscious or convulsing. DO NOT INDUCE VOMITING. Have victim rinse out mouth and drink 8 to 10 oz. (240 to 300 ml) of water to dilute the material in stomach. If vomiting occurs naturally, have victim lean forward to reduce the risk of aspiration. Obtain medical attention immediately.

Most Important Symptoms/Effects:

Acetic acid vapours (by-product of curing reaction) may be irritating. Inhalation of concentrated vapours may cause serious damage to the lining of the nose, throat and lungs. Bronchopneumonia and pulmonary edema may develop following acute over-exposure.

Concentrated acetic acid vapours can cause moderate eye irritation and burns.

Repeated dermal exposure to acetic acid may cause irritation and thickening of the skin and dark colouration. Dermatitis may develop following acute over-exposure.

Indication of Immediate Medical Attention and Special Treatment Needed:

There is no specific antidote if this product is ingested.

Treat symptomatically.



5. Fire Fighting Measures

Suitable Extinguishing Media:

Chemical foam, dry chemical, CO₂.

Unsuitable Extinguishing Media:

Do not use water jet as an extinguisher as this may spread the fire.

Specific Hazards:

Hazardous combustion products: carbon dioxide, carbon monoxide, formaldehyde, silicon dioxide.

Special Protective Equipment and Precautions for Firefighters:

Sealant will burn if heated strongly. Water can be used to cool material below flash point. Sealant may emit noxious or toxic fumes. Self-Contained Breathing Apparatus (SCBA) should be used for all indoor fires and any significant outdoor fires. Full protective clothing should be worn at all times.

6. Accidental Release Measures

Personal Precautions, Protective Equipment and Emergency Procedures:

Make sure all personnel involved in the clean-up follow good industrial hygiene practices. A small spill can be handled routinely. Use adequate ventilation and equipment, and wear protective clothing as detailed in Section 8 Exposure Controls / Personal Protection and/or the product label.

Methods and Materials for Containment and Cleaning Up:

Restrict access to area of spill. Provide ventilation and protective clothing as required for the situation. Scrape-up sealant with cardboard or a rag and place in a disposal container.

Environmental Precautions:

Review local, regional and/or national regulations for disposal. Silicone wastes can often be incinerated in approved facilities. Solid waste can often be sent to designated landfill sites.

7. Handling and Storage

Precautions for Safe Handling:

KEEP OUT OF REACH OF CHILDREN. Prevent eating, drinking, tobacco use, and cosmetic application in areas where there is a potential for exposure to the material. Avoid breathing vapours. Wear full protective clothing and equipment as detailed in Section 8 Exposure Controls / Personal Protection. After work, rinse gloves and remove protective equipment, and wash hands thoroughly with soap and water after handling, and before eating, tobacco use, drinking, applying cosmetics or using the toilet. Wash contaminated clothing before re-use and separate from household laundry.

Conditions for Safe Storage, Including any Incompatibilities:

Store in cool dry conditions. Keep container tightly sealed when not in use. Protect product and contaminated materials from uncontrolled release into the environment, or from access by animals, birds or unauthorized people. Clean up spilled material immediately.

8. Exposure Controls / Personal Protection

Control Parameters:

Chemical Name	OSHA PEL	ACGIH TLV	Other	NTP/IARC/ OSHA Carcinogen	Canada TLV
Silicon dioxide*	10 mg/m ³ inhalable; 3 mg/m ³ respirable.	Not established.	Not established.	IARC Group 3	Ontario 10 mg/m ³ TLV; Quebec 6 mg/m ³ TLV
Diacetyl-di-tert-butyl orthosilicate	10 ppm TWA	Not established.	Not established.	Not established.	Not established.
Ethylsilanetriyltriacetate	Not established.	10 ppm TWA	10 ppm (supplier)	Not established.	Not established.
Acetic Acid**	10 ppm / 25 mg/m ³ TWA	10 ppm TWA, 15 ppm STEL	10 ppm TWA, 15 ppm STEL	Not established.	Not established.

REL = recommended exposure limit; STEL = short-term exposure limit; TLV = threshold limit value; TWA = time weighted average

* Component(s) are bound in the formulation and are not an exposure concern in the mixture or cured product.

** Acetic acid may be released as a by-product of curing when material is in contact with moist or humid air.

Appropriate Engineering Controls:

If necessary, ensure work areas have adequate ventilation, containment, and procedures sufficient to maintain airborne levels below the TLV. Provide separate washing/shower and eating facilities.

Individual Protection Measures:

General: Avoid breathing dusts, vapours or aerosols. Avoid contact with eye, skin and clothing. Wash thoroughly after handling, and before eating, drinking, applying cosmetics or handling tobacco.

Eye/Face Protection: Safety glasses / chemical splash goggles.

Skin Protection: Impervious gloves, coveralls and/or aprons may be useful to prevent contamination of skin and clothing. Choose gloves to protect hands against chemicals depending on the concentration specific to the place of work. Breakthrough time is not determined for the product. Change gloves often. We recommend clarifying the resistance of chemicals to protective gloves with the glove manufacturer. Wash hands before breaks and at the end of the workday.

Respiratory Protection: General and local exhaust ventilation is recommended to maintain vapour exposures below the recommended limits. Where concentrations are unknown or are above the recommended limits, a NIOSH/MSHA approved respirator with an organic vapour cartridge should be used. Protection provided by air purifying respirators against exposure to any hazardous chemical is limited. Use a positive pressure air supplier respirator if there is any potential for uncontrolled release, exposure levels are unknown, or any other circumstance where air purifying respirators may not provide adequate protection.

9. Physical and Chemical Properties

Appearance: Thixotropic paste.

Odour: Vinegar like or acetic acid odour.

Odour Threshold: Not available.

pH: Not available.

Melting Point: Not available.

Freezing Point: Not available.

Initial Boiling Point: Not available.

Boiling Point Range: Not available.

Flash Point: 83 – 84 °C (181.4 – 183.2 °F),
P.M.C.S., ASTM D-93

Evaporation Rate: Not applicable.

Flammability: Not applicable.

Upper/Lower Flammability Limits: Not applicable.

Vapour Pressure: Negligible @ 25 °C (77 °F).

Vapour Density: Not applicable.

Relative Density: 1.02

Solubility(ies): Insoluble – water. Soluble in most
organic solvents.

Partition Coefficient (n-octanol/water): Not available.

Auto-Ignition Temperature: Not applicable.

Decomposition Temperature: Not available.

Viscosity: Not available.

VOC Content: 41.82 g/L (0.35 lb/gallon)

10. Stability and Reactivity

Reactivity:

Not reactive under normal use and storage conditions.

Stability:

Stable under normal use and storage conditions.

Possibility of Hazardous Reactions:

During a fire, irritating and possibly toxic gases may be generated by thermal decomposition or combustion.

Conditions to Avoid:

Humid or moist air conditions (acetic acid vapour release during curing). Temperatures above the flash point.

Incompatible Materials:

Strong oxidizers, concentrated acids or bases cause degradation of the polymer. Boiling water may soften and weaken material.

Hazardous Decomposition Products:

Combustion will produce silicon dioxide, carbon dioxide and carbon monoxide. A component of this product can generate formaldehyde at approximately 150 °C (300 °F) and above in the atmosphere containing oxygen. Formaldehyde is a skin and respiratory sensitizer, eye and throat irritant, acute toxicant and potential carcinogen.

11. Toxicological Information

Relevant routes of exposure:

	Acute Effects	Chronic Effects
Inhalation	Acetic acid vapours (by-product of curing reaction) may be irritating. Inhalation of concentrated vapours may cause serious damage to the lining of the nose, throat and lungs. Bronchopneumonia and pulmonary edema may develop following acute over-exposure.	Effects unknown.
Ingestion	May cause irritation and obstruction to gastro-intestinal tract.	Effects unknown.
Skin Contact	Product contains components that are listed as skin corrosion / irritation category 2 (may cause skin irritation). Dermatitis due to acetic acid released from product may develop following acute over-exposure.	Repeated exposure to acetic acid may cause irritation and thickening of the skin and dark colouration.
Eye Contact	Concentrated acetic acid vapours can cause moderate irritation and burns.	Effects unknown.
Other	No data available.	No data available.

Product releases acetic acid vapours during curing when in contact with water or humid air. Toxicological effects data for acetic acid exposure have been included under the appropriate headings where available.

Acute Toxicity:

Product	Silicon dioxide	Diacetyl-di-tert-butyl orthosilicate	Ethylsilanetriyltracetate
LD50 oral, rat, calculated, 3,900 mg/kg.	LD50, rat, oral >5,110 mg/kg; LD50, rabbit, eye/skin >2,000 mg/kg; LC50, rat, inhalation > 4 mg/L.	No data available.	LD50 oral, rat 380 mg/kg.

Note: acetic acid vapours may be irritating. Inhalation of concentrated vapours may cause serious damage to the lining of the nose, throat and lungs. Bronchopneumonia and pulmonary edema may develop following acute exposure.

Skin Irritation:

Product	Silicon dioxide	Diacetyl-di-tert-butyl orthosilicate	Ethylsilanetriyltracetate
No data available.	Not irritating to skin (rabbit).	Causes severe skin burns and eye damage.	Caustic effect on skin and mucous membranes.

Note: repeated exposure to acetic acid may cause irritation and thickening of the skin and dark colouration. Dermatitis may develop following acute overexposure.

Eye Irritation:

Product	Silicon dioxide	Diacetyl-di-tert-butyl orthosilicate	Ethylsilanetriyltracetate
No data available.	Not irritating to eyes (rabbit).	Causes serious eye damage.	Strong caustic effect.

Note: concentrated acetic acid vapours can cause moderate irritation and burns.

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Mutagenicity:

Product	Silicon dioxide	Diacetyl-di-tert-butyl orthosilicate	Ethylsilanetriyltracetate
No data available.	There is no evidence that SAS induced mutations/genotoxic either in vitro or in vivo in standard methods.	No data available.	No data available.

Carcinogenicity:

Product	Silicon dioxide	Diacetyl-di-tert-butyl orthosilicate	Ethylsilanetriyltracetate
No data available.	IARC Group 3.	No data available.	No data available.

NOTE: Silicon dioxide is fully bound in the product formulation and is not an inhalation hazard in either the mixture or cured product.

The ingredients of this product are not listed as carcinogens by the National Toxicology Program, and have not been evaluated by the International Agency for Research on Cancer (IARC) or the American Conference of Government Industrial Hygienists (ACGIH) (if not detailed above).

Reproductive Toxicity:

Product	Silicon dioxide	Diacetyl-di-tert-butyl orthosilicate	Ethylsilanetriyltracetate
No data available.	The study on rats and mice gave no evidence of adverse effects on reproduction and development.	No data available.	No data available.

Teratogenicity:

Product	Silicon dioxide	Diacetyl-di-tert-butyl orthosilicate	Ethylsilanetriyltracetate
No data available.	The study on rats and mice gave no evidence of adverse effects on reproduction and development.	No data available.	No data available.

Specific Target Organ Toxicity (STOT) – Single Exposure:

Product	Silicon dioxide	Diacetyl-di-tert-butyl orthosilicate	Ethylsilanetriyltracetate
No data available.	No clinical symptoms (rat, inhalation).	No data available.	No data available.

Specific Target Organ Toxicity (STOT) – Repeated Exposure:

Product	Silicon dioxide	Diacetyl-di-tert-butyl orthosilicate	Ethylsilanetriyltracetate
No data available.	The inhalation of respirable particles of SAS produce a time and dose related inflammation response of the lung tissue in animal studies. All these effects were reversible following discontinuation of exposure.	No data available.	No data available.

NOTE: Silicon dioxide is fully bound in the product formulation and is not an inhalation hazard in either the mixture or cured product.

Aspiration Hazard:

Product	Silicon dioxide	Diacetyl-di-tert-butyl orthosilicate	Ethylsilanetriyltracetate
No data available.	No data available.	No data available.	No data available.

Chronic Toxicity:

Product	Silicon dioxide	Diacetyl-di-tert-butyl orthosilicate	Ethylsilanetriyltracetate
No data available.	No data available.	No data available.	No data available.

NOTE: Silicon dioxide is fully bound in the product formulation and is not an inhalation hazard in either the mixture or cured product.

12. Ecological Information

Ecotoxicity - Acute:

Product	Silicon dioxide	Diacetyl-di-tert-butyl orthosilicate	Ethylsilanetriyltracetate
No data available.	EC50, 48h, Daphnia magna >10,000 mg/L..	No data available.	LC50, 72h, Pseudokirchneriella supcapita, 73 mg/L; LC50, 96h, Brachydanio rerio, 251 mg/l.

Ecotoxicity - Chronic:

Product	Silicon dioxide	Diacetyl-di-tert-butyl orthosilicate	Ethylsilanetriyltracetate
No data available.	No data available.	No data available.	No data available.

Persistence and Degradability:

Product	Silicon dioxide	Diacetyl-di-tert-butyl orthosilicate	Ethylsilanetriyltracetate
No data available.	Log Kow 0.53 (estimated)	No data available.	Easily biodegradable, DOC 74%/21d (Prufbericht OECD 301A).

Bioaccumulative Potential:

Product	Silicon dioxide	Diacetyl-di-tert-butyl orthosilicate	Ethylsilanetriyltracetate
No data available.	BCF 3.162 (estimated).	No data available.	No data available.

Mobility in Soil:

Product	Silicon dioxide	Diacetyl-di-tert-butyl orthosilicate	Ethylsilanetriyltracetate
No data available.	Koc 2.881 (estimated).	No data available.	No data available.

Other Adverse Effects:

Product	Silicon dioxide	Diacetyl-di-tert-butyl orthosilicate	Ethylsilanetriyltracetate
No data available.	No data available.	No data available.	No data available.

13. Disposal Considerations

Disposal Methods:

Dispose of waste at an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.



14. Transport Information

Transport Information

	Land Transport (TDG/ USDOT)	Sea Transport (AND/MDG)	Air Transport (IATA-DGR)
This material is not subject to transport regulations.			

UN Number

UN Proper Shipping Name

Transport Hazard Class

Packing Group

Environmental Hazards

Special Precautions for User:

Not applicable.

Transport in Bulk According to Annex II of Marpol 73/78 and the IBC Code:

Not applicable.

15. Regulatory Information

Canadian Federal Regulations

This product has been classified in accordance with the hazard criteria of the Hazardous Products Regulations (HPR), and the MSDS contains all the information required by the HPR.

DSL Inventory:

All chemical substances in this material are included in or exempted from the DSL.

US Federal Regulations

TSCA Inventory:

All chemical substances in this material are included in or exempted from the TSCA.

CERCLA Reportable Quantity:

None present on none present in regulated quantities.

SARA 304 Extremely Hazardous Substances Reportable Quantity:

This material does not contain any components with a section 304 EHS RQ.

SARA 311/312 Hazard Categories:

Not applicable.

SARA 302 Extremely Hazardous Substance:

No chemicals in this material are subject to reporting requirements of SARA Title III, Section 302

SARA 313 Emergency Release Notification:

This material does not contain any chemical components with known CAS numbers that exceed the threshold reporting levels established by SARA Title III, Section 313.

US State Regulations

U.S. California Proposition 65

No ingredient regulated by CA Prop 65 present.

U.S. New Jersey Worker and Community Right-to-Know Act

No ingredient regulated by NJ Right-to-Know Law present.

U.S. Massachusetts Right-to-Know Act- Substance List

Silicon dioxide, CAS 7631-86-9, 5 - 10%

U.S. Pennsylvania Right-to-Know Act - Hazardous Substances

Silicon dioxide, CAS 7631-86-9, 5 - 10%



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U.S. Rhode Island Right-Know Act

No ingredient regulated by RI Right-to-Know Law present.

Other Regulations

The regulatory information is not intended to be comprehensive. Other regulations may apply to this material.

The ingredients of this product are reported in the following inventories:

AICS (Australia)	On or in compliance with the inventory.
DSL (Canada)	On or in compliance with the inventory.
ENCS/ISHL (Japan)	On or in compliance with the inventory.
IECSC (China)	On or in compliance with the inventory.
KECI (Korea)	On or in compliance with the inventory.
NZIoC (New Zealand)	On or in compliance with the inventory.
PICCS (Phillipines)	On or in compliance with the inventory.
REACH (European Union)	On or in compliance with the Inventory.
TSCA (USA)	On or in compliance with the inventory.

16. Other Information

Issue Date (D/M/Y): 12/04/2022

Replaces (D/M/Y): 02/09/2015

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information provided is designed only as guidance for safe handling, use, processing, storage, transportation, and release and is not considered a warranty or product specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

It is the responsibility of persons in receipt of this product Safety Data Sheet (SDS) to ensure that the information contained herein is properly read and understood by all people who may use, handle, dispose or in any way come in contact with the product.

All information and instructions provided in this Safety Data Sheet are based on the current state of scientific and technical knowledge at the date indicated on the present SDS. CSL Silicones shall not be held responsible for any defect in the product covered by this SDS, should the existence of such defect not be detectable considering the current state of scientific and technical knowledge.

This Safety Data Sheet has been prepared in compliance with applicable Canadian and United States law. If you purchase this material outside Canada or the United States, where compliance laws may differ, you should receive from your local CSL Silicones supplier a SDS applicable to the country in which the product is sold or intended to be used. Please note that the appearance and contents of the SDS may vary, even for the same product, between different countries, reflecting the compliance requirements.