

Safety Data Sheet

OSHA HazCom Standard 29 CFR 1910.1200(g) revised in 2024 and GHS Rev 07.

Date of issue: 03/05/2025

Reviewed on 03/05/2025

* 1 Identification

- **Product identifier**
- **Trade name:** **SIL-BOND RTV 4500 Aluminium**
- **Other means of identification**
- **Product Description:** No further information is available.
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
Silco Inc.
7635 St. Clair Avenue
Mentor, OH 44060
Phone: 440-975-8886
Fax: 440-975-8887
www.silco-inc.com
- **Emergency telephone number:** 440-975-8886

2 Hazard(s) identification

- **Classification of the substance or mixture**
The product does not need classification according to OSHA HazCom Standard 29 CFR paragraph (d) of §1910.1200(g) revised in 2024 and GHS Rev 07.
The product is not classified, according to the Globally Harmonized System (GHS).

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- **Label elements**
 - **GHS label elements** Non-Regulated Material
 - **Hazard pictograms** Non-Regulated Material
 - **Signal word** Non-Regulated Material
 - **Hazard statements** Non-Regulated Material
 - **Unknown acute toxicity:**
This value refers to knowledge of known, established toxicological or ecotoxicological values.
0 % of the mixture consists of component(s) of unknown toxicity.
 - **Information pertaining to particular dangers for man and environment:**
 - **Classification system:** NFPA/HMIS Definitions: 0-Least, 1-Slight, 2-Moderate, 3-High, 4-Extreme
 - **NFPA ratings (scale 0 - 4)**



- **HMIS-ratings (scale 0 - 4)**



- **Other hazards**
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Classification according to (d)(1)(ii) of § 1910.1200**

The SDS issuer does not object to the classifications provided by importers or manufacturers of precursor products.

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· **Hazards not otherwise classified**

There are no adverse physical or health effects known that are not covered by the hazard classes of the Hazard Communications Standard.

3 Composition/information on ingredients

· **Chemical characterization: Mixtures**

· **Description:** Mixture of the substances listed below with nonhazardous additions.

· **Dangerous components:**

CAS: 7429-90-5 RTECS: BD 0330000	aluminium powder (stabilised)	1–5%
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· **Additional information:**

The exact percentages of the ingredients of this mixture are considered to be proprietary and are withheld in accordance with the provisions of paragraph (i) of §1910.1200 of 29 CFR 1910.1200 Trade Secrets.

4 First-aid measures

· **Description of first aid measures**

· **General information:** No special measures required.

· **After inhalation:** Supply fresh air; consult doctor in case of complaints.

· **After skin contact:**

Wash with soap and water.

If skin irritation occurs, consult a doctor.

· **After eye contact:**

Rinse opened eye for several minutes under running water.

If easy to do so, remove contact lenses if worn.

If eye irritation occurs, consult a doctor.

· **After swallowing:** If swallowed and symptoms occur, consult a doctor.

· **Most important symptoms and effects, both acute and delayed**

Aside from the information found under Description of first aid measures (above) and Indication of immediate medical attention and special treatment needed (below), any additional important symptoms and effects are described in Section 11: Toxicology Information.

· **Indication of any immediate medical attention and special treatment needed**

No specific antidote. Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient.

Treat symptomatically.

* 5 Fire-fighting measures

· **Extinguishing media**

· **Suitable extinguishing agents:**

Use fire fighting measures that suit the environment.

CO₂, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

· **For safety reasons unsuitable extinguishing agents:**

Carbon oxides, Silicon oxides, Metal oxides

Exposure to combustion products may be a hazard to health.

· **Special hazards arising from the substance or mixture** No further relevant information available.

· **Advice for firefighters**

· **Protective equipment:**

As in any fire, wear self-contained breathing apparatus pressure-demand (NIOSH approved or equivalent) and full protective gear to prevent contact with skin and eyes.

· **Additional information** Cool fire exposed containers with water.

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6 Accidental release measures

· **Personal precautions, protective equipment and emergency procedures**

Wear protective equipment. Keep unprotected persons away.

· **Environmental precautions:**

Do not allow to enter sewers / surface or ground water.

Inform respective authorities in case of seepage into water course or sewage system.

· **Methods and material for containment and cleaning up:**

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Dispose contaminated material as waste according to section 13.

· **Protective Action Criteria for Chemicals**

Protective Action Criteria (PACs) are essential components for planning and response to uncontrolled releases of hazardous chemicals.

· **PAC-1:**

PAC 1: Mild, transient health effects.

64-19-7	acetic acid	5 ppm
108-24-7	acetic anhydride	0.5 ppm
7631-86-9	Silicon dioxide, (Amorphous)	18 mg/m ³
13463-67-7	Titanium Dioxide	30 mg/m ³
63148-62-9	Polydimethylsiloxanes (PDMS)	65 mg/m ³
70131-67-8	Polydimethylsiloxane silanol terminated	190 mg/m ³

· **PAC-2:**

PAC 2: Irreversible or other serious health effects that could impair the ability to take protective action.

64-19-7	acetic acid	35 ppm
108-24-7	acetic anhydride	15 ppm
7631-86-9	Silicon dioxide, (Amorphous)	200 ppm
13463-67-7	Titanium Dioxide	330 mg/m ³
63148-62-9	Polydimethylsiloxanes (PDMS)	720 mg/m ³
70131-67-8	Polydimethylsiloxane silanol terminated	2,100 mg/m ³

· **PAC-3:**

PAC 3: Life-threatening health effects.

64-19-7	acetic acid	250 ppm
108-24-7	acetic anhydride	100 ppm
7631-86-9	Silicon dioxide, (Amorphous)	1200 ppm
13463-67-7	Titanium Dioxide	2,000 mg/m ³
63148-62-9	Polydimethylsiloxanes (PDMS)	4,300 mg/m ³
70131-67-8	Polydimethylsiloxane silanol terminated	13,000 mg/m ³

· **Reference to other sections**

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

* 7 Handling and storage

· **Precautions for safe handling** Ensure good ventilation/exhaustion at the workplace.

· **Information about protection against explosions and fires:** No special measures required.

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- **Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** Keep in properly labelled containers.
- **Information about storage in one common storage facility:** See Section 10 (Incompatible materials)
- **Further information about storage conditions:** Keep container tightly sealed.
- **Specific end use(s)** No further relevant information available.

8 Exposure controls/personal protection

- **Control parameters**
- **Components with limit values that require monitoring at the workplace:**
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
- **Additional information:** The lists that were valid during the creation of this SDS were used as basis.
- **Exposure controls**
Ventilation must be adequate to maintain the ambient workplace atmosphere below the exposure limit(s) outlined in the SDS. Where acceptable concentrations cannot be maintained by general mechanical ventilation, local exhaust ventilation is recommended.
- **Appropriate engineering controls** No further data; see section 7.
- **Personal protective equipment:**
- **General protective and hygienic measures:**
Wash hands before breaks and at the end of work.
Keep away from foodstuffs, beverages and feed.
Avoid contact with the eyes and skin.
- **Breathing equipment:**
Respiratory protection should be worn when there is a potential to exceed the exposure limit requirements or guidelines. If there are no applicable exposure limit requirements or guidelines, wear respiratory protection when adverse effects, such as respiratory irritation or discomfort have been experienced, or where indicated by your risk assessment process.
For most conditions no respiratory protection should be needed; however, if discomfort is experienced, use an approved air-purifying respirator. The following should be effective types of air-purifying respirators: Organic vapor cartridge with a particulate pre-filter.
- **Protection of hands:** Not required.
- **Material of gloves**
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.
- **Penetration time of glove material**
The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
- **Eye protection:**



Safety glasses

- **Limitation and supervision of exposure into the environment**
Keep away from drains, surface and ground waters.
Avoid release into the environment.

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9 Physical and chemical properties

· Information on basic physical and chemical properties

· General Information

· Physical state

Liquid

· Color:

See product specifications

· Odor:

Acetic acid like

· Odor threshold:

Not determined.

· Melting point/Melting range:

Undetermined.

· Boiling point/Boiling range:

Undetermined.

· Flammability:

Not applicable.

· Explosion limits:

· Lower:

Not determined.

· Upper:

Not determined.

· Flash point:

>100 °C (>212 °F)

· Decomposition temperature:

Not determined.

· pH-value:

Not determined.

· Viscosity:

· Kinematic:

Not determined.

· Dynamic:

Not determined.

· Solubility in / Miscibility with

· Water:

Not miscible or difficult to mix.

· Partition coefficient (n-octanol/water):

Not determined.

· Vapor pressure:

Not determined.

· Vapor pressure:

· Density at 20 °C (68 °F):

1.007 g/cm³ (8.40341 lbs/gal)

· Relative density

Not determined.

· Vapor density

Not determined.

· Particle characteristics

Not applicable.

· Other information

· Appearance:

· Form:

Paste

· Important information on protection of health and environment, and on safety.

· Ignition temperature:

Product is not self-igniting.

· Danger of explosion:

Product does not present an explosion hazard.

· Solvent content:

· Organic solvents:

>0.0 %

· VOC content:

>0.00 %

>0.0 g/l / >0.00 lb/gal

· Change in condition

· Oxidizing properties

None

· Evaporation rate

Not determined.

10 Stability and reactivity

· Reactivity

The product is stable under normal conditions.

No further relevant information available.

· Chemical stability Stable under normal conditions.

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· **Thermal decomposition / conditions to be avoided:**

Thermal decomposition will result in the following: Carbon oxides, Silicon oxides, Metal oxides.

· **Possibility of hazardous reactions**

Can react with strong oxidizing agents.

When heated to temperatures above 150 °C (300 °F) in the presence of air, trace quantities of formaldehyde may be released. Adequate ventilation is required.

· **Conditions to avoid** No further relevant information available.

· **Incompatible materials:** Strong oxidizing agents.

· **Hazardous decomposition products:**

Formaldehyde

Hydrogen

11 Toxicological information

· **Information on toxicological effects**

· **Acute toxicity:**

· **LD/LC50 values that are relevant for classification:** No data available.

· **Primary irritant effect:**

· **on the skin:** Mild irritant effect.

· **on the eye:** Mild irritant effect.

· **Sensitization:** No sensitizing effects known.

· **Additional toxicological information:**

· **Interactive effects** No interactive effects between components are known.

· **Carcinogenic categories**

· **IARC (International Agency for Research on Cancer)**

None of the ingredients is listed.

· **NTP (National Toxicology Program)**

None of the ingredients is listed.

· **OSHA-Ca (Occupational Safety & Health Administration)**

None of the ingredients is listed.

· **Alternative sources for toxicological information**

No non-standard sources for toxicological information where used.

12 Ecological information

· **Toxicity**

· **Aquatic toxicity:** No further relevant information available.

· **Persistence and degradability** No further relevant information available.

· **Bioaccumulative potential** No further relevant information available.

· **Mobility in soil** No further relevant information available.

· **Results of PBT and vPvB assessment**

· **PBT:** Not applicable.

· **vPvB:** Not applicable.

· **Other adverse effects**

· **Additional ecological information:**

· **General notes:**

Water hazard class 3 (Self-assessment): extremely hazardous for water

Do not allow product to reach ground water, water course or sewage system, even in small quantities.

Danger to drinking water if even extremely small quantities leak into the ground.

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13 Disposal considerations

- **Waste treatment methods**
- **Recommendation:**
Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
Observe all federal, state and local environmental regulations when disposing of this material.
- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.

14 Transport information

- **UN-Number**
- **DOT, IMDG, IATA** Non-Regulated Material
- **UN proper shipping name**
- **DOT, IMDG, IATA** Non-Regulated Material
- **Transport hazard class(es)**
- **DOT, ADN, IMDG, IATA**
- **Class** Non-Regulated Material
- **Packing group**
- **DOT, IMDG, IATA** Non-Regulated Material
- **Environmental hazards:** Not applicable.
- **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code** Not applicable.
- **Special precautions for user** Not applicable.
- **UN "Model Regulation":** Non-Regulated Material

15 Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**
No further relevant information available.
- **Sara**

· **Section 355 (extremely hazardous substances):**

None of the ingredients is listed.

· **Section 313 (Specific toxic chemical listings):**

7429-90-5 Aluminium

· **TSCA (Toxic Substances Control Act):**

7429-90-5	Aluminium	ACTIVE
64-19-7	acetic acid	ACTIVE
108-24-7	acetic anhydride	ACTIVE
1332-37-2	Iron oxide	ACTIVE
7631-86-9	Silicon dioxide, (Amorphous)	ACTIVE
13463-67-7	Titanium Dioxide	ACTIVE
63148-62-9	Polydimethylsiloxanes (PDMS)	ACTIVE
70131-67-8	Polydimethylsiloxane silanol terminated	ACTIVE

· **Hazardous Air Pollutants**

None of the ingredients is listed.

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· Proposition 65

· Chemicals known to cause cancer:

13463-67-7	Titanium Dioxide
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· Chemicals known to cause reproductive toxicity for females:

None of the ingredients is listed.

· Chemicals known to cause reproductive toxicity for males:

None of the ingredients is listed.

· Chemicals known to cause developmental toxicity:

None of the ingredients is listed.

· New Jersey Right-to-Know List:

7429-90-5	Aluminium
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64-19-7	acetic acid
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108-24-7	acetic anhydride
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13463-67-7	Titanium Dioxide
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· New Jersey Special Hazardous Substance List:

7429-90-5	Aluminium	F3, R1
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64-19-7	acetic acid	CO, F2
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108-24-7	acetic anhydride	CO, F2, R1
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· Pennsylvania Right-to-Know List:

7429-90-5	Aluminium
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64-19-7	acetic acid
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108-24-7	acetic anhydride
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7631-86-9	Silicon dioxide, (Amorphous)
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13463-67-7	Titanium Dioxide
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· Pennsylvania Special Hazardous Substance List:

7429-90-5	Aluminium	E
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64-19-7	acetic acid	E
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108-24-7	acetic anhydride	E
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· Carcinogenic categories

· EPA (Environmental Protection Agency)

None of the ingredients is listed.

· TLV (Threshold Limit Value)

7429-90-5	Aluminium	A4
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13463-67-7	Titanium Dioxide	A4
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· NIOSH-Ca (National Institute for Occupational Safety and Health)

13463-67-7	Titanium Dioxide
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· GHS label elements Void

· Hazard pictograms Void

· Signal word Void

· Hazard statements Void

· Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

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16 Other information

The information and recommendations in this safety data sheet are, to the best of our knowledge, accurate as of the date of issue. Nothing herein shall be deemed to create warranty, expressed or implied, and shall not establish a legally valid contractual relationship. It is the responsibility of the user to determine applicability of this information and the suitability of the material or product for any particular purpose.

· **SDS created by:** Access GHS, LLC - 888-363-4870 - Team@access-ghs-sds.com

· **Date of previous version** 02/24/2025

· **Version number of previous version:** 1

· **Date of preparation** 03/05/2025

· **Abbreviations and acronyms:**

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

VOC: Volatile Organic Compounds (USA, EU)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

NIOSH: National Institute for Occupational Safety and Health

OSHA: Occupational Safety & Health

TLV: Threshold Limit Value

PEL: Permissible Exposure Limit

REL: Recommended Exposure Limit

· *** Data compared to the previous version altered.**