

Safety Data Sheet (SDS)

OSHA HazCom Standard 29 CFR 1910.1200(g) and GHS Rev 03.

Issue date 04/05/2019

Reviewed on 04/05/2019

* 1 Identification

- **Product Identifier**
- **Trade Name:** *SIL-BOND RTV 4500 Black*
- **Relevant identified uses of the substance or mixture and uses advised against:**
No further relevant information available.
- **Product Description:** No further relevant information 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
- **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) and GHS Rev 03.
- **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.
3 % of the mixture consists of component(s) of unknown toxicity.
- **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)**

HEALTH	0	Health = 0
FIRE	1	Fire = 1
REACTIVITY	0	Physical Hazard = 0

- **Hazard(s) not otherwise classified (HNOC):** None known

3 Composition/Information on Ingredients

- **Chemical characterization: Mixtures**
- **Description:** Mixture of substances listed below with non-hazardous additions.

· **Dangerous Components:**

CAS: 7429-90-5	Aluminium	≤1.575%
RTECS: BD 0330000		

· **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.

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4 First-Aid Measures

- **Description of first aid measures**
- **After inhalation:** Supply fresh air; consult doctor if symptoms persist.
- **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.
- **Information for 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.

5 Fire-Fighting Measures

- **Extinguishing media**
- **Suitable extinguishing agents:**
CO₂, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **For safety reasons unsuitable extinguishing agents:** No further relevant information.
- **Special hazards arising from the substance or mixture:**
Carbon oxides, Silicon oxides, Metal oxides
Exposure to combustion products may be a hazard to health.
- **Advice for firefighters**
- **Special protective equipment for firefighters:**
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.

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:**
Ensure adequate ventilation.
Absorb with liquid-binding material (i.e. sand, diatomite, acid binders, universal binders, sawdust).
Dispose contaminated material as waste according to section 13.
- **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.

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· Protective Action Criteria for Chemicals

· PAC-1:		
64-19-7	Acetic Acid	5 ppm
108-24-7	acetic anhydride	0.5 ppm
70131-67-8	Hydroxy terminated polydimethylsiloxane	190 mg/m ³
7631-86-9	Silicon Dioxide	18 mg/m ³
63148-62-9	Polydimethylsiloxane	65 mg/m ³
13463-67-7	Titanium Dioxide	30 mg/m ³
· PAC-2:		
64-19-7	Acetic Acid	35 ppm
108-24-7	acetic anhydride	15 ppm
70131-67-8	Hydroxy terminated polydimethylsiloxane	2,100 mg/m ³
7631-86-9	Silicon Dioxide	740 mg/m ³
63148-62-9	Polydimethylsiloxane	720 mg/m ³
13463-67-7	Titanium Dioxide	330 mg/m ³
· PAC-3:		
64-19-7	Acetic Acid	250 ppm
108-24-7	acetic anhydride	100 ppm
70131-67-8	Hydroxy terminated polydimethylsiloxane	13,000 mg/m ³
7631-86-9	Silicon Dioxide	4,500 mg/m ³
63148-62-9	Polydimethylsiloxane	4,300 mg/m ³
13463-67-7	Titanium Dioxide	2,000 mg/m ³

7 Handling and Storage

- **Handling**
- **Precautions for safe handling:** Ensure good ventilation/exhaustion at the workplace.
- **Information about protection against explosions and fires:** No special measures required.
- **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 receptacle tightly sealed.
- **Specific end use(s):** No further relevant information available.

8 Exposure Controls/Personal Protection

- **Additional information about design of technical systems:** No further data; see section 7.
- **Control parameters:**
- **Components with occupational exposure limits:**
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.

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· **Personal protective equipment**

· **General protective and hygienic measures:**

The usual precautionary measures for handling chemicals should be followed.

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing and wash before reuse.

Wash hands before breaks and at the end of work.

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 necessary under normal conditions.

· **Material of gloves:** Not applicable.

· **Penetration time of glove material:** Not applicable.

· **Eye protection:**



Safety glasses with side shields

· **Limitation and supervision of exposure into the environment:** None

* 9 Physical and Chemical Properties

· **Information on basic physical and chemical properties**

· **General Information**

· **Appearance:**

Form:

Paste

Color:

Black

· **Odor:**

Acetic acid like

· **Odor threshold:**

Not determined.

· **pH-value:**

Not applicable.

· **Change in condition**

Melting point/Melting range:

Not determined.

Boiling point/Boiling range:

Not determined.

· **Flash point:**

>100 °C (>212 °F)

· **Flammability (solid, gaseous):**

Not applicable.

· **Ignition temperature:**

Not applicable

· **Decomposition temperature:**

Not determined.

· **Auto igniting:**

Product is not self-igniting.

· **Danger of explosion:**

Product does not present an explosion hazard.

· **Explosion limits:**

Lower:

Not determined.

Upper:

Not determined.

· **Vapor pressure:**

Not determined.

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- **Density:**
 - Relative density:** 1.007
 - Vapor density:** Not determined.
 - Evaporation rate:** Not determined.
- **Solubility in / Miscibility with:**
 - Water:** Not miscible or difficult to mix.
- **Partition coefficient (n-octanol/water):** Not determined.
- **Viscosity:**
 - Dynamic:** Not determined.
 - Kinematic:** Not determined.
- **Solvent content:**
 - Organic solvents:** 2.0 %
 - VOC content:** 2.00 %
- **Other information:** No further relevant information available.

10 Stability and Reactivity

- **Reactivity:** No further relevant information available.
- **Chemical stability:**
- **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.
- **Additional toxicological information:**
The product shows the following dangers according to internally approved calculation methods for preparations:
Irritant
- **Carcinogenic categories:**

· IARC (International Agency for Research on Cancer):
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None of the ingredients are listed.

· NTP (National Toxicology Program):

None of the ingredients are listed.

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

None of the ingredients are listed.

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12 Ecological Information

· **Toxicity:**

· **Aquatic toxicity:**

64-19-7 Acetic Acid

EC50 >300.82 mg/l (Water flea)

13463-67-7 Titanium Dioxide

EC50 >1,000 mg/l (Water flea)

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

· **Behavior in environmental systems:**

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

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

· **Additional ecological information:**

· **General notes:**

Do not allow undiluted product or product that has not been neutralized to reach ground water, water course or sewage system.

· **Results of PBT and vPvB assessment:**

· **PBT:** Not applicable.

· **vPvB:** Not applicable.

· **Other adverse effects:** No further relevant information available.

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 packaging**

· **Recommendation:** Disposal must be made according to official regulations.

14 Transport Information

· **UN-Number:**

· **DOT, ADR/ADN, ADN, IMDG, IATA**

Non-Regulated Material

· **UN proper shipping name:**

· **DOT, ADR/ADN, ADN, IMDG, IATA**

Non-Regulated Material

· **Transport hazard class(es):**

· **DOT, ADR/ADN, ADN, IMDG, IATA**

· **Class:**

Non-Regulated Material

· **Packing group:**

· **DOT, ADR/ADN, IMDG, IATA**

Non-Regulated Material

· **Environmental hazards:**

Not applicable.

· **Special precautions for user:**

Not applicable.

· **Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code:**

Not applicable.

· **UN "Model Regulation":**

Non-Regulated Material

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15 Regulatory Information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture:**
- **SARA (Superfund Amendments and Reauthorization):**

· Section 355 (extremely hazardous substances):

None of the ingredients are 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
70131-67-8	Hydroxy terminated polydimethylsiloxane	ACTIVE
7631-86-9	Silicon Dioxide	ACTIVE
63148-62-9	Polydimethylsiloxane	ACTIVE
1332-37-2	Iron oxide	ACTIVE
13463-67-7	Titanium Dioxide	ACTIVE

· Hazardous Air Pollutants

None of the ingredients are listed.

· California Proposition 65:

This product contains a chemical that is at or below California Propositions 65's "safe harbor level" as determined via a risk assessment. Therefore, the chemical is not required to be listed as a Prop 65 chemical on the SDS or label.

· Chemicals known to cause cancer:

None of the ingredients are listed.

· Chemicals known to cause reproductive toxicity for females:

None of the ingredients are listed.

· Chemicals known to cause reproductive toxicity for males:

None of the ingredients are listed.

· Chemicals known to cause developmental toxicity:

None of the ingredients are listed.

· New Jersey Right-to-Know List:

7429-90-5	Aluminium
64-19-7	Acetic Acid
108-24-7	acetic anhydride
13463-67-7	Titanium Dioxide

· New Jersey Special Hazardous Substance List:

7429-90-5	Aluminium	F3, R1
64-19-7	Acetic Acid	CO, F2
108-24-7	acetic anhydride	CO, F2, R1

· Pennsylvania Right-to-Know List:

7429-90-5	Aluminium
64-19-7	Acetic Acid

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108-24-7	acetic anhydride
7631-86-9	Silicon Dioxide
13463-67-7	Titanium Dioxide

· **Pennsylvania Special Hazardous Substance List:**

7429-90-5	Aluminium	E
64-19-7	Acetic Acid	E
108-24-7	acetic anhydride	E

· **Carcinogenic categories:**

· **EPA (Environmental Protection Agency):**

None of the ingredients are listed.

· **TLV (Threshold Limit Value established by ACGIH):**

7429-90-5	Aluminium	A4
13463-67-7	Titanium Dioxide	A4

· **NIOSH-Ca (National Institute for Occupational Safety and Health):**

13463-67-7	Titanium Dioxide
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· **GHS label elements** Non-Regulated Material

· **Hazard pictograms:** Non-Regulated Material

· **Signal word:** Non-Regulated Material

· **Hazard statements:** Non-Regulated Material

· **National regulations:**

None of the ingredients are listed.

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

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.

· **Date of last revision/ revision number:** 04/05/2019 / 16

· **Abbreviations and acronyms:**

ADR: The European Agreement concerning the International Carriage of Dangerous Goods by Road

ADN: The European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

ACGIH: American Conference of Governmental Industrial Hygienists

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 Administration

TLV: Threshold Limit Value

PEL: Permissible Exposure Limit

REL: Recommended Exposure Limit

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

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