

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 Black**
- **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**



GHS08 Health hazard

Carcinogenicity 2 H351 Suspected of causing cancer. Route of exposure: Inhalation.

- **Label elements**
- **GHS label elements** The product is classified and labeled according to the Globally Harmonized System (GHS).
- **Hazard pictograms**



GHS08

- **Signal word** Warning
- **Hazard-determining components of labeling:**
Carbon black
- **Hazard statements**
Suspected of causing cancer. Route of exposure: Inhalation.
- **Precautionary statements**
Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.
IF exposed or concerned: Get medical advice/attention.
Store locked up.
Dispose of contents/container in accordance with local/regional/national/international regulations.
- **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

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· NFPA ratings (scale 0 - 4)



Health = 0
Fire = 1
Reactivity = 0

· HMIS-ratings (scale 0 - 4)



Health = 0
Fire = 1
Reactivity = 0

· 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.

· 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: 1333-86-4 RTECS: FF 5150100	Carbon black	 Carcinogenicity 2, H351	0.1–1%
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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:** 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.

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* 5 Fire-fighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:** Use fire fighting measures that suit the environment.
- **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.

* 6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures** Not required.
- **Environmental precautions:** Do not allow to enter sewers / surface or ground water.
- **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.

1333-86-4	Carbon black	9 mg/m ³
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
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.

1333-86-4	Carbon black	290 mg/m ³
64-19-7	acetic acid	35 ppm
108-24-7	acetic anhydride	15 ppm
7631-86-9	Silicon dioxide, (Amorphous)	200 ppm
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.

1333-86-4	Carbon black	1750 mg/m ³
64-19-7	acetic acid	250 ppm
108-24-7	acetic anhydride	100 ppm
7631-86-9	Silicon dioxide, (Amorphous)	1200 ppm
63148-62-9	Polydimethylsiloxanes (PDMS)	4,300 mg/m ³

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70131-67-8	Polydimethylsiloxane silanol terminated	13,000 mg/m ³
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· **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** Open and handle receptacle with care.

· **Information about protection against explosions and fires:** Keep respiratory protective device available.

· **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

· **Control parameters**

· **Components with limit values that require monitoring at the workplace:**

1333-86-4 Carbon black

PEL Long-term value: 3.5 mg/m³

REL Long-term value: 3.5* mg/m³

*0.1 in presence of PAHs; See Pocket Guide Apps.A+C

TLV Long-term value: 3* mg/m³

*inhalable fraction, A3

· **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:**

Keep away from foodstuffs, beverages and feed.

Wash hands before breaks and at the end of work.

Store protective clothing separately.

· **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.

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· **Protection of hands:**



Protective gloves

· **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:**



Goggles recommended during refilling.

· **Limitation and supervision of exposure into the environment**

Keep away from drains, surface and ground waters.

Avoid release into the environment.

None

* 9 Physical and chemical properties

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

· **General Information**

· **Physical state**

Liquid

· **Color:**

Black

· **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.

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- **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.
- **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:**

1333-86-4 Carbon black

Oral	LD50	10,000 mg/kg (rat)
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- **Primary irritant effect:**
- **on the skin:** Mild irritant effect.
- **on the eye:** Mild irritant effect.
- **Sensitization:** No sensitizing effects known.
- **Additional toxicological information:**
The product shows the following dangers according to internally approved calculation methods for preparations:
- **Interactive effects** No interactive effects between components are known.

- **Carcinogenic categories**

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

Although IARC has classified Carbon Black as possibly carcinogenic to humans (2B), their summary concludes: "No significant exposure to carbon black is thought to occur during the use of products which carbon black is bound to other materials, such as in cosmetics, paints and inks." This applies to all other applications where Carbon Black is

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bound to other materials and does not present a respirable hazard.

Group 1 - Carcinogenic to humans

Group 2A - Probably carcinogenic to humans

Group 2B - Possibly carcinogenic to humans

Group 3 - Not classifiable as to its carcinogenicity to humans

Group 4 - Probably not carcinogenic to humans

1333-86-4	Carbon black	2B
7631-86-9	Silicon dioxide, (Amorphous)	3

· 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.

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

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- **Packing group**
 - **DOT, IMDG, IATA**
 - **Environmental hazards:**
 - **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code**
 - **Special precautions for user**
 - **UN "Model Regulation":**
- Non-Regulated Material
Not applicable.
Not applicable.
Not applicable.
Non-Regulated Material

*15 Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Sara**

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

None of the ingredients is listed.

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

None of the ingredients is listed.

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

1333-86-4	Carbon black	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
63148-62-9	Polydimethylsiloxanes (PDMS)	ACTIVE
70131-67-8	Polydimethylsiloxane silanol terminated	ACTIVE

· **Hazardous Air Pollutants**

None of the ingredients is listed.

· **Proposition 65**

· **Chemicals known to cause cancer:**



WARNING: This product can expose you to chemicals including [one or more listed chemical] which is [are] known to the State of California to cause cancer [or birth defects or other reproductive harm]. For more information, go to www.P65Warnings.ca.gov.

1333-86-4 Carbon black

· **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:**

1333-86-4 Carbon black
64-19-7 acetic acid
108-24-7 acetic anhydride

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· New Jersey Special Hazardous Substance List:		
1333-86-4	Carbon black	CA
64-19-7	acetic acid	CO, F2
108-24-7	acetic anhydride	CO, F2, R1

· Pennsylvania Right-to-Know List:		
64-19-7	acetic acid	
108-24-7	acetic anhydride	
7631-86-9	Silicon dioxide, (Amorphous)	

· Pennsylvania Special Hazardous Substance List:		
64-19-7	acetic acid	E
108-24-7	acetic anhydride	E

· Carcinogenic categories

· EPA (Environmental Protection Agency)		
None of the ingredients is listed.		

· TLV (Threshold Limit Value)

1333-86-4	Carbon black	A4
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· NIOSH-Ca (National Institute for Occupational Safety and Health)

1333-86-4	Carbon black	
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· GHS label elements The product is classified and labeled according to the Globally Harmonized System (GHS).

· Hazard pictograms



GHS08

· Signal word Warning

· Hazard-determining components of labeling:

Carbon black

· Hazard statements

Suspected of causing cancer. Route of exposure: Inhalation.

· Precautionary statements

Obtain special instructions before use.

Do not handle until all safety precautions have been read and understood.

Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.

IF exposed or concerned: Get medical advice/attention.

Store locked up.

Dispose of contents/container in accordance with local/regional/national/international regulations.

· 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.

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

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- **Date of previous version** 04/05/2019
- **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
 - Carcinogenicity 2: Carcinogenicity – Category 2
- *** Data compared to the previous version altered.**