



# Filler

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Date of issue: 10/21/2015

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Version: 1.0

### SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1. Product identifier

Trade name : Filler

#### 1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture : To fill cracks and holes, to strengthen a seam and/or to increase cure speed of cyanoacrylate adhesives

#### 1.3. Details of the supplier of the safety data sheet

Tech-Bond Solutions  
3774 Old Columbus Rd., NW  
Carroll, OH 43112 - United States  
T 877-565-7225; F 866 411 0032  
[www.tbbonding.com](http://www.tbbonding.com) – [sales@tech-bond.net](mailto:sales@tech-bond.net)

#### 1.4. Emergency telephone number

Emergency number : 1-877-565-7225

### SECTION 2: Hazards identification

#### 2.1. Classification of the substance or mixture

##### Silica Sand

**Physical:** Not hazardous

**Health:** Carcinogen category: 1A

**Specific Target Organ Toxicity:** Repeated Exposure, Category 1

##### Sodium hydrogen carbonate

There are no appreciable health or environmental effects associated with this material.

Hazardous classification: Not Classified

#### 2.2. Label elements

#### GHS-US labelling

Hazard pictograms (GHS-US)



GHS08

#### 2.3. Other hazards

Danger

Eyes: Direct contact may cause irritation due to abrasion.

Skin: Not skin irritants.

Inhalation: Causes damage to lungs through prolonged or repeated exposure by inhalation.

### SECTION 3: Composition/information on ingredients

#### 3.1. Substance

Full text of H-phrases: see section 16

#### 3.2. Mixture

##### Hazardous ingredients:

Name	Product identifier	%	GHS-US classification
Sodium hydrogen carbonate	(CAS No) 144-55-8	30 - 50	N/A
Crystalline Silica (Quartz)	(CAS No) 14808-60-7	40 - 70	Carcinogen Category: 1A

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### SECTION 4: 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 inhalation	: Remove victim from exposure ensuring one's own safety whilst doing so. If unconscious, check for breathing and apply artificial respiration if necessary. Consult a doctor.
First-aid measures after skin contact	: Rinse skin immediately with plenty of soap and water/shower for 10 minutes or longer. Remove/Take off immediately all contaminated clothing.
First-aid measures after eye contact	: Rinse immediately with plenty of water for at least 15 minutes. Obtain medical attention if pain, blinking or redness persist.
First-aid measures after ingestion	: Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.

#### 4.2. Most important symptoms and effects, both acute and delayed

Symptoms/injuries after inhalation	: May cause drowsiness or dizziness.
Symptoms/injuries after skin contact	: Causes skin irritation.
Symptoms/injuries after eye contact	: May cause slight irritation.
Symptoms/injuries after ingestion	: Risk of aspiration pneumonia. May be fatal if swallowed and enters airways.

### SECTION 5: Fire-fighting measures

#### 5.1. Extinguishing media

Suitable extinguishing media	: Product is not flammable, combustible or explosive.
Unsuitable extinguishing media	: N/A

#### 5.2. Special hazards arising from the substance or mixture

Fire hazard	: N/A
Explosion hazard	: N/A
Reactivity	: N/A

#### 5.3. Advice for firefighters

None required

### SECTION 6: Accidental release measures

#### 6.1. Personal precautions, protective equipment and emergency procedures

General measures	: Remove ignition sources. Use special care to avoid static electric charges. No naked lights. No smoking.
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##### 6.1.1. For non-emergency personnel

Protective equipment	: Protective clothing. Protective goggles. Safety glasses. Gloves.
Emergency procedures	: Evacuate unnecessary personnel.

##### 6.1.2. For emergency responders

Protective equipment:	Equip cleanup crew with proper protection.
Emergency procedures.	Ventilate area.

#### 6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

#### 6.3. Methods and material for containment and cleaning up

Methods for cleaning up	: Avoid dry sweeping. Do not use compressed air to clean spilled Filler. Use water spraying/flushing or ventilated or HEPA filtered vacuum cleaning system, or wet before sweeping. Dispose of in closed containers.
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### 6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

Additional hazards when processed	N/A
Precautions for safe handling	: Avoid generating dust. Do not rely on your sight to determine if dust is in the air. Respirable crystalline silica dust may be in the air without a visible dust cloud. Use exhaust ventilation and dust collection to reduce respirable crystalline silica dust levels to below the permissible exposure limits ("PEL"). Maintain and test ventilation and dust collection equipment. If necessary wear a respirator.
Hygiene measures	: Handle in accordance with good industrial hygiene and safety practice. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

### 7.2. Conditions for safe storage, including any incompatibilities

Use dust collection to trap dust produced during loading and unloading. Keep containers closed and store bags to avoid accidental tearing, breaking or bursting.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

Crystalline Silica		
OSHA PEL	10 mg/ml % SiO <sub>2</sub> + 2 TWA (ppm)	Respirable dust
OSHA PEL	30 mg/m <sup>3</sup> % SiO <sub>2</sub> + 2 TWA (ppm)	Total dust
Crystalline Silica		
ACGIH TLV	0.025 mg/m <sup>3</sup> TWA	Respirable dust
NIOSH REL	0.05 mg/m <sup>3</sup> TWA	Respirable dust

If crystalline silica (quartz) is heated to more than 870°C, quartz can change to a form of crystalline silica known as tridymite; if crystalline silica (quartz) is heated to more than 1470°C, quartz can change to a form of crystalline silica known as cristobalite. The OSHA PEL for crystalline silica as tridymite or cristobalite is one half of the OSHA PEL for crystalline silica (quartz).

Appropriate Engineering Controls:

Use adequate general or local exhaust ventilation to maintain concentrations in the workplace below the applicable exposure limits listed above.

Respiratory Protection:

If it is not possible to reduce airborne exposure levels to below the OSHA PEL or other applicable limits with ventilation, use the table below to assist you in selecting respirators that will reduce personal exposures to below the OSHA PEL. This table is part of the NIOSH Respirator Selection Logic, 2004, Chapter III, Table 1, "Particulate Respirators". The full document can be found at [www.cdc.gov/niosh/npptl/topics/respirators](http://www.cdc.gov/niosh/npptl/topics/respirators); the user of this SDS is directed to that site for information concerning respirator selection and use.

The assigned protection factor (APF) is the maximum anticipated level of protection provided by each type of respirator worn in accordance with an adequate respiratory protection program. For example, an APF of 10 means that the respirator should reduce the airborne concentration of a particulate by a factor of 10, so that if the workplace concentration of a particulate was 150 ug/m<sup>3</sup>, then a respirator with an APF of 10 should reduce the concentration of particulate to 15 ug/m<sup>3</sup>. In using chemical cartridges, consideration must be given to selection of the correct cartridge for the chemical exposure and the maximum use concentration for the cartridge. In addition a cartridge change-out schedule must be developed based on the concentrations in the workplace.

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Assigned protection factor <sup>1</sup>	Type of Respirator (Use only NIOSH-certified respirators)
10	Any air-purifying elastomeric half-mask respirator equipped with an appropriate type of particulate filter. <sup>2</sup> Appropriate filtering respirator. <sup>2,3</sup> Any air-purifying full facepiece respirator. <sup>2</sup> Any negative pressure (demand) supplied-air respirator equipped with a half-mask.
25	Any powered air-purifying respirator equipped with a hood or helmet and a high-efficiency (HEPA) filter. Any continuous flow supplied-air respirator equipped with a hood or helmet.
50	Any air-purifying full faceplate respirator equipped with N-100, R-100, or P-100 filter(s). Any powered air-purifying respiration equipped with a tight fitting facepiece (half or full). Any negative pressure (demand) supplied-air respirator equipped with a full facepiece. Any continuous flow supplied-air respirator equipped with a tight-fitting facepiece (half or full) Any negative pressure (demand) self-contained respirator with a full facepiece.
1,000	Pressure-demand supplied air respirators equipped with a half-mask.

### 8.2. Exposure controls

Personal protective equipment	: Avoid all unnecessary exposure. Gloves. Protective clothing. Protective goggles. Safety glasses.
Hand protection	: Wear protective gloves.
Eye protection	: Safety glasses with side shields or goggles recommended.
Skin and body protection	: Wear suitable protective clothing. Wear protective gloves.
Other information	: None known.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Physical state	: Powder
Appearance	: Small Crystals
Color	: Off-white
Odor	: None detected
Relative evaporation rate (butylacetate=1)	: 2.7
Boiling point	: 4046° F
Flash point	: Not applicable
Self ignition temperature	: Not applicable
Vapor pressure	: Not applicable
Relative Density	2.65
pH	: 6 - 8
Solubility	: Sodium bicarbonate is soluble in water.
Flammable limits	: Not applicable

### 9.2. Other information

VOC content	: Not applicable
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## SECTION 10: Stability and reactivity

### 10.1. Reactivity

No reactivity hazard.

### 10.2. Chemical stability

Stable under normal conditions.

### 10.3. Possibility of hazardous reactions

Contact with powerful oxidizing agents, such as fluorine, chlorine, trifluoride and oxygen difluoride, may cause fires

### 10.4. Conditions to avoid

Avoid generation of dust in handling and use.

### 10.5. Incompatible materials

Powerful oxidizers such as fluorine, chlorine trifluoride, and oxygen difluoride and hydrofluoric acid.

### 10.6. Hazardous decomposition products

Silica will dissolve in hydrofluoric acid and produce a corrosive gas, silicon tetrafluoride.

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### SECTION 11: Toxicological information

#### Acute effects of exposure:

##### Inhalation:

Inhalation of dust may cause respiratory tract irritation.

Symptoms of exposure may include: cough, sore throat, nasal congestion, sneezing, wheezing and shortness of breath.

##### Ingestion:

Ingestion in an unlikely route of exposure. If dust is swallowed, it may irritate the mouth and throat

##### Skin contact:

No adverse effects are expected.

##### Eye contact:

Particulates may cause abrasive injury.

##### Chronic effects:

Prolonged inhalation of respirable crystalline silica may cause lung disease, silicosis, lung cancer and other effects as indicated below.

**The method of exposure that can lead to the adverse health effects described below is inhalation.**

#### A. SILICOSIS

Silicosis can exist in several forms, chronic (or ordinary), accelerated, or acute:

Chronic or Ordinary Silicosis is the most common form of silicosis, and can occur after many years (10 to 20 or more) of prolonged repeated inhalation of relatively low levels of airborne respirable crystalline silica dust. It is further defined as either simple or complicated silicosis. Simple silicosis is characterized by lung lesions (shown as radiographic opacities) less than 1 centimeter in diameter, primarily in the upper lung zones. Often, simple silicosis is not associated with symptoms, detectable changes in lung function or disability. Simple silicosis may be progressive and may develop into complicated silicosis or progressive massive fibrosis (PMF). Complicated silicosis or PMF is characterized by lung lesions (shown as radiographic opacities) greater than 1 centimeter in diameter. Complicated silicosis or PMF symptoms, if present, are shortness of breath and cough. Complicated silicosis or PMF may be associated with decreased lung function and may be disabling. Advanced complicated silicosis or PMF may lead to death. Advanced complicated silicosis or PMF can result in heart disease secondary to the lung disease (corpumonale).

Accelerated Silicosis can occur with prolonged repeated inhalation of high concentrations of respirable crystalline silica over a relatively short period; the lung lesions can appear within five (5) years of initial exposure. Progression can be rapid. Accelerated silicosis is similar to chronic or ordinary silicosis, except that lung lesions appear earlier and progression is more rapid.

Acute Silicosis can occur after the repeated inhalation of very high concentrations of respirable crystalline silica over a short time period, sometimes as short as a few months. The symptoms of acute silicosis include progressive shortness of breath, fever, cough, weakness and weight loss. Acute silicosis is fatal.

#### B. CANCER

IARC - The International Agency for Research on Cancer ("IARC") concluded that "crystalline silica in the form of quartz or cristobalite dust is carcinogenic to humans (Group 1)".

For further information on the IARC evaluation, see IARC Monographs on the Evaluation of Carcinogenic Risks to Humans, Volume 100C, "A Review of Human Carcinogens: Arsenic, Metals, Fibres and Dusts" (2011).

NTP classifies "Silica, Crystalline (respirable size)" as Known to be a human carcinogen.

#### C. AUTOIMMUNE DISEASES

Several studies have reported excess cases of several autoimmune disorders -- scleroderma, systemic lupus erythematosus, rheumatoid arthritis -- among silica-exposed workers.

#### D. TUBERCULOSIS

Individuals with silicosis are at increased risk to develop pulmonary tuberculosis, if exposed to tuberculosis bacteria. Individuals with chronic silicosis have a three-fold higher risk of contracting tuberculosis than similar individuals without silicosis.

#### E. KIDNEY DISEASE

Several studies have reported excess cases of kidney diseases, including end stage renal disease, among silica-exposed workers. For additional information on the subject, the following may be consulted: "Kidney Disease and Silicosis", Nephron, Volume 85, pp. 14-19 (2000).

#### F. NON-MALIGNANT RESPIRATORY DISEASES

The reader is referred to Section 3.5 of the NIOSH Special Hazard Review cited below for information concerning the association between exposure to crystalline silica and chronic bronchitis, emphysema and small airways disease. There are studies that disclose an association between dusts found in various mining occupations and non-malignant respiratory diseases, particularly among smokers. It is unclear whether the observed associations exist only with underlying silicosis, only among smokers, or result from exposure to mineral dusts generally (independent of the presence or absence of crystalline silica, or the level of crystalline silica in the dust).

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### Sources of information:

The NIOSH Hazard Review -

Occupational Effects of Occupational Exposure to Respirable Crystalline Silica published in April 2002 summarizes and discusses the medical and epidemiological literature on the health risks and diseases associated with occupational exposures to respirable crystalline silica. The NIOSH Hazard Review is available from NIOSH –

Publications Dissemination,

4676 Columbia Parkway,

Cincinnati, OH 45226,

or through the NIOSH web site, [www.cdc.gov/niosh/topics/silica](http://www.cdc.gov/niosh/topics/silica), then click on the link "NIOSH Hazard Review: Health Effects of Occupational Exposure to Respirable Crystalline Silica".

For a more recent review of the health effects of respirable crystalline silica, the reader may consult Fishman's Pulmonary Diseases and Disorders, Fourth Edition, Chapter 57. "Coal Workers' Lung Diseases and Silicosis".

Finally, the US Occupational Safety and Health Administration (OSHA) published a summary of respirable crystalline silica health effects in connection with OSHA's Proposed Rule regarding occupational exposure to respirable crystalline silica. The summary was published in the September 12, 2013 Federal Register, which can be found at [www.federalregister.gov/articles/2013/09/12/2013-20997/occupational-exposure-to-respirable-crystalline-silica](http://www.federalregister.gov/articles/2013/09/12/2013-20997/occupational-exposure-to-respirable-crystalline-silica). Numerical measures of toxicity: Crystalline Silica (quartz): LD50 oral rat >22,500 mg/kg

### 12.0 Toxicity

#### Ecotoxicity:

Crystalline silica (quartz) nor bicarbonate of soda are not known to be ecotoxic.

#### Persistence and degradability:

Silica nor bicarbonate of soda are not degradable.

#### Bioaccumulative potential:

Silica nor bicarbonate of soda are not bioaccumulative.

#### Mobility in soil:

Silica nor bicarbonate of soda are not mobile in soil.

#### Other adverse effects:

No data available

### Disposal considerations

Discard any product, residue, disposable container(s) or liner(s) in full compliance with national regulations.

### 13.1. Waste treatment methods

## SECTION 14: Transport information

**UN number:** None

**UN proper shipping name:** Not regulated

**Transport hazard classes(es):** None

**Packing group, if applicable:** None

**Environmental hazards:** None

**Transport in bulk (according to Annex II of MARPOL 73/78 and the IBC Code):** Not determined

**Special precautions:** None known.

### Additional information

#### Hazardous Material Information System (HMIS):

Health \*

Flammability 0

Physical Hazard 0

Protective Equipment E

\* For further information on health effects, see Sections 2, 8 and 11 of this SDS.

#### National Fire Protection Association (NFPA):

Health 0

Flammability 0

Instability 0

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### Web Sites with Information about Effects of Crystalline Silica Exposure:

The U. S. Silica Company web site will provide updated links to OSHA and NIOSH web sites addressing crystalline silica issues: [www.ussilica.com](http://www.ussilica.com), click on "Info Center", then click on "Health & Safety". The U.S. National Institute for Occupational Safety and Health (NIOSH) and Occupational Safety and Health Administration (OSHA) maintain sites with information about crystalline silica and its potential health effects.

For NIOSH, <http://www.cdc.gov/niosh/topics/silica>; for OSHA, <http://www.osha.gov/dsg/topics/silicacrystalline/index>

The IARC Monograph that includes crystalline silica, Volume 100C, can be accessed in PDF form at the IARC web site, <http://monographs.iarc.fr/ENG/Monographs/PDFs/index.php>.

## SECTION 15: Regulatory information

### 15.1. US Federal regulations

#### UNITED STATES (FEDERAL AND STATE)

##### TSCA Status:

Crystalline silica (quartz) appears on the EPA TSCA inventory under the CAS No. 14808-60-7

##### RCRA:

This product is not classified as a hazardous waste under the Resource Conservation and Recovery Act, or its regulations, 40 CFR §261 et seq.

##### CERCLA:

Crystalline silica (quartz) is not classified as a hazardous substance under regulations of the Comprehensive Environmental Response Compensation and Liability Act (CERCLA), 40CFR §302.

##### Emergency Planning and Community Right to Know Act (SARA Title III):

This product contains the following chemicals subject to SARA 302 or SARA 313 reporting: None above the de minimus concentrations

##### Clean Air Act:

Crystalline silica (quartz) mined and processed by U.S. Silica Company is not processed with or does not contain any Class I or Class II ozone depleting substances.

##### FDA:

Silica is included in the list of substances that may be included in coatings used in food contact surfaces, 21 CFR §175.300(b)(3)(xxvi).

##### California Proposition 65:

Crystalline silica (airborne particles of respirable size) is classified as a substance known to the State of California to be a carcinogen. California Inhalation Reference Exposure Level (REL): California established a chronic non-cancer effect REL of 3 µg for silica (crystalline, respirable). A chronic REL is an airborne level of a substance at or below which no non-cancer health effects are anticipated in individuals indefinitely exposed to the substance at that level.

##### Massachusetts Toxic Use Reduction Act:

Silica, crystalline (respirable size, <10 microns) is "toxic" for purposes of the Massachusetts Toxic Use Reduction Act.

##### Pennsylvania Worker and Community Right to Know Act:

Quartz is a hazardous substance under the Act, but it is not a special hazardous substance or an environmental hazardous substance.

##### Texas Commission on Environmental Quality:

The Texas CEQ has established chronic and acute Reference Values and short term and long term Effects Screening Levels for crystalline silica (quartz). The information can be accessed through [www.tceq.texas.gov](http://www.tceq.texas.gov)

### 15.2. International regulations CANADA

#### Domestic Substances List:

Silica and bicarbonate of soda, as naturally occurring substances, are on the Canadian DSL.

**WHMIS Classification:** D2A

#### 15.2.2. National regulations

##### Australian Inventory of Chemical Substances (AICS):

All of the components of this product are listed on the AICS inventory or exempt from notification requirements.

##### China:

Silica is listed on the IECSC inventory or exempt from notification requirements.

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### **Japan Ministry of International Trade and Industry (MITI):**

All of the components of this product are existing chemical substances as defined in the Chemical Substance Control Law Registry Number 1-548.

### **Korea Existing Chemicals Inventory (KECI) (set up under the Toxic Chemical Control Law):**

Listed on the ECL with registry number 9212-5667.

### **New Zealand:**

Silica is listed on the HSNO inventory or exempt from notification requirements.

### **Philippines Inventory of Chemicals and Chemical Substances (PICCS):**

Listed for PICCS.

### **Taiwan:**

Silica is listed on the CSNN inventory or exempt from notification requirements

### **15.3. Other regulations**

No information is available.

SDS US (GHS HazCom 2012)

*This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200.*

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