



Material Safety Data Sheet

Silicon, Powder, -60 Mesh, 99.999%

MSDS# 96900

Section 1 - Chemical Product and Company Identification

MSDS Name: Silicon, Powder, -60 Mesh, 99.999%  
Catalog Numbers: AC225510000, AC225510050  
Synonyms: None.

Company Identification: Acros Organics BVBA  
Janssen Pharmaceuticaaan 3a  
2440 Geel, Belgium  
Acros Organics  
One Reagent Lane  
Fair Lawn, NJ 07410  
Company Identification: (USA)  
For information in the US, call: 800-ACROS-01  
For information in Europe, call: +32 14 57 52 11  
Emergency Number, Europe: +32 14 57 52 99  
Emergency Number US: 201-796-7100  
CHEMTREC Phone Number, US: 800-424-9300  
CHEMTREC Phone Number, Europe: 703-527-3887

Section 2 - Composition, Information on Ingredients

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CAS#: 7440-21-3  
Chemical Name: Silicon  
%: >99  
EINECS#: 231-130-8  
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Hazard Symbols: F



Risk Phrases: 11

Section 3 - Hazards Identification

EMERGENCY OVERVIEW

Warning! Flammable solid. Moisture sensitive. May cause central nervous system depression. May cause eye and skin irritation. May cause respiratory and digestive tract irritation. Chronic inhalation of crystalline silica may lead to fibrotic lung disease, silicosis or cancer. Target Organs: Central nervous system, lungs.

Potential Health Effects

Eye: May cause chemical conjunctivitis and corneal damage.

Skin: May cause irritation and dermatitis. May cause cyanosis of the extremities.

Ingestion: May cause gastrointestinal irritation with nausea, vomiting and diarrhea. Ingestion of large amounts may cause CNS depression.

Inhalation: Aspiration may lead to pulmonary edema. Contains crystalline silica which may lead to respiratory abnormalities and silicosis. Inhalation of dusts cause severe irritation of the upper respiratory tract, gastrointestinal disturbances, albuminuria, gradual loss of weight, and increasing weakness. May cause burning sensation in the chest.

Chronic inhalation of dust may lead to silicosis. May cause silicosis-disabling pulmonary fibrosis characterized by

Chronic: fibrotic changes and miliary nodules in the lungs, dry cough, shortness of breath, emphysema, decreased chest expansion and increased susceptibility to tuberculosis.

#### Section 4 - First Aid Measures

Eyes: Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid.

Skin: Get medical aid. Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse.

Ingestion: Never give anything by mouth to an unconscious person. Get medical aid. Do NOT induce vomiting. If conscious and alert, rinse mouth and drink 2-4 cupfuls of milk or water.

Inhalation: Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid.

Notes to Physician:

#### Section 5 - Fire Fighting Measures

General Information: As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. Dusts at sufficient concentrations can form explosive mixtures with air. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Use water spray to keep fire-exposed containers cool. Containers may explode in the heat of a fire. May be ignited by friction, heat, sparks, or flame. May react violently or explosively on contact with water. May re-ignite after fire is extinguished.

Extinguishing Media: Use water spray to cool fire-exposed containers. Use dry sand, Met-L-X powder, or G-1 graphite powder. Do NOT get water inside containers. DO NOT USE WATER, CO2, OR FOAM DIRECTLY ON FIRE ITSELF. Use dry sand, graphite powder, dry sodium chloride-based extinguishers.

Autoignition Temperature: > 150 deg C (> 302.00 deg F)

Flash Point: Not applicable.

Explosion Limits: Lower: Not available

Explosion Limits: Upper: Not available

NFPA Rating: health: 1; flammability: 3; instability: 0;

#### Section 6 - Accidental Release Measures

General Information: Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks: Very fine particles can cause a fire or explosion. Eliminate all ignition sources. Clean up spills immediately, observing precautions in the Protective Equipment section. Sweep up, then place into a suitable container for disposal. Avoid generating dusty conditions. Use a spark-proof tool. Provide ventilation. Do not get water inside containers.

#### Section 7 - Handling and Storage

Handling: Remove contaminated clothing and wash before reuse. Use with adequate ventilation. Ground and bond containers when transferring material. Use spark-proof tools and explosion proof equipment. Avoid contact with eyes, skin, and clothing. Empty containers retain product residue, (liquid and/or vapor), and can be dangerous. Keep container tightly closed. Keep away from heat, sparks and flame. Avoid ingestion and inhalation. Do not allow contact with water. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose empty containers to heat, sparks or open flames. Keep from contact with moist air and steam.

Storage: Keep away from heat, sparks, and flame. Keep away from sources of ignition. Store in a tightly closed container. Store in a cool, dry, well-ventilated area away from incompatible substances. Flammables-area. Store protected from moisture.

#### Section 8 - Exposure Controls, Personal Protection

Chemical Name	ACGIH	NIOSH	OSHA - Final PELs
Silicon	none listed	10 mg/m3 TWA (total dust); 5 mg/m3 TWA	15 mg/m3 TWA (total dust); 5 mg/m3 TWA

		(respirable dust)	(respirable fraction)
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OSHA Vacated PELs: Silicon: 10 mg/m3 TWA (total dust); 5 mg/m3 TWA (respirable fraction)

Engineering Controls:

Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate general or local explosion-proof ventilation to keep airborne levels to acceptable levels.

Exposure Limits

Personal Protective Equipment

Eyes: Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Skin: Wear appropriate protective gloves to prevent skin exposure.

Clothing: Wear appropriate protective clothing to prevent skin exposure.

Respirators: A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements or European Standard EN 149 must be followed whenever workplace conditions warrant respirator use.

Section 9 - Physical and Chemical Properties

Physical State: Crystalline powder

Color: white crystalline powder

Odor: None reported.

pH: Not available

Vapor Pressure: Not available

Vapor Density: Not available

Evaporation Rate: Not available

Viscosity: Not available

Boiling Point: 2355 deg C @ 760.00mm Hg ( 4,271.00°F)

Freezing/Melting Point: 1410 deg C ( 2,570.00°F)

Decomposition Temperature: Not available

Solubility in water: insoluble in nitric acid and hydrochlori

Specific Gravity/Density: 2.3300g/cm3

Molecular Formula: Si

Molecular Weight: 28.09

Section 10 - Stability and Reactivity

Chemical Stability: Stable under normal temperatures and pressures.

Conditions to Avoid: Incompatible materials, ignition sources, dust generation, moisture, excess heat, strong oxidants.

Incompatibilities with Other Materials: Strong oxidizing agents, moisture.

Hazardous Decomposition Products: Moisture, oxides of silicon.

Hazardous Polymerization: Has not been reported.

Section 11 - Toxicological Information

RTECS#: CAS# 7440-21-3: VW0400000

RTECS:

LD50/LC50: CAS# 7440-21-3: Draize test, rabbit, eye: 3 mg Mild; Oral, rat: LD50 = 3160 mg/kg;

Carcinogenicity: Silicon - Not listed as a carcinogen by ACGIH, IARC, NTP, or CA Prop 65.

Other: See actual entry in RTECS for complete information.

Section 12 - Ecological Information

Not available

### Section 13 - Disposal Considerations

Dispose of in a manner consistent with federal, state, and local regulations.

### Section 14 - Transport Information

US DOT

Shipping Name: Please contact Fisher Scientific for shipping information

Hazard Class:

UN Number:

Packing Group:

Canada TDG

Shipping Name: Not available

Hazard Class:

UN Number:

Packing Group:

### Section 15 - Regulatory Information

European/International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols: F

Risk Phrases:

R 11 Highly flammable.

Safety Phrases:

S 7/9 Keep container tightly closed and in a well-ventilated place.

S 9 Keep container in a well-ventilated place.

S 16 Keep away from sources of ignition - No smoking.

S 28A After contact with skin, wash immediately with plenty of water.

S 33 Take precautionary measures against static discharges.

S 37 Wear suitable gloves.

S 45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

WGK (Water Danger/Protection)

CAS# 7440-21-3: Not available

Canada

CAS# 7440-21-3 is listed on Canada's DSL List

Canadian WHMIS Classifications: B4

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by those regulations.

CAS# 7440-21-3 is not listed on Canada's Ingredient Disclosure List.

US Federal

TSCA

CAS# 7440-21-3 is listed on the TSCA

Inventory.

### Section 16 - Other Information

MSDS Creation Date: 9/02/1997

Revision #8 Date 7/20/2009

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no

event shall the company be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential, or exemplary damages howsoever arising, even if the company has been advised of the possibility of such damages.

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