

Material Safety Data Sheet

acc. to OSHA and ANSI

Printing date 11/10/2008

Reviewed on 07/11/2008

1 Identification of substance:

Product details:

Product name: Silicon plate

Stock number: 39112

Manufacturer/Supplier:

Alfa Aesar, A Johnson Matthey Company
 Johnson Matthey Catalog Company, Inc.
 30 Bond Street
 Ward Hill, MA 01835-8099
 Emergency Phone: (978) 521-6300
 CHEMTREC: (800) 424-9300
 Web Site: www.alfa.com

Information Department: Health, Safety and Environmental Department

Emergency information:

During normal hours the Health, Safety and Environmental Department.
 After normal hours call Chemtrec at (800) 424-9300.

2 Composition/Data on components:

Chemical characterization:

Description: (CAS#)

Silicon (CAS# 7440-21-3): 100%

Identification number(s):

EINECS Number: 231-130-8

3 Hazards identification

Hazard description: Not applicable

Information pertaining to particular dangers for man and environment

Not applicable

Classification system

HMIS ratings (scale 0-4)

(Hazardous Materials Identification System)

HEALTH	0	Health (acute effects) = 0
FIRE	0	Flammability = 0
REACTIVITY	0	Reactivity = 0

4 First aid measures

General information No special measures required.

After inhalation Seek medical treatment in case of complaints.

After skin contact Generally the product does not irritate the skin.

After eye contact

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

After swallowing Seek medical treatment.

5 Fire fighting measures

Suitable extinguishing agents

Special powder for metal fires. Do not use water.

For safety reasons unsuitable extinguishing agents Water

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Special hazards caused by the material, its products of combustion or resulting gases:

In case of fire, the following can be released:

Silicon oxide

Protective equipment: No special measures required.**6 Accidental release measures****Person-related safety precautions:** Not required.**Measures for environmental protection:**

Do not allow material to be released to the environment without proper governmental permits.

Measures for cleaning/collecting: Pick up mechanically.**Additional information:**

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**Handling****Information for safe handling:**

Keep container tightly sealed.

Store in cool, dry place in tightly closed containers.

No special precautions are necessary if used correctly.

Information about protection against explosions and fires:

The product is not flammable

Storage**Requirements to be met by storerooms and receptacles:**

No special requirements.

Information about storage in one common storage facility:

Store away from oxidizing agents.

Store away from halogens.

Further information about storage conditions: None.**8 Exposure controls and personal protection****Additional information about design of technical systems:**

No further data; see item 7.

Components with limit values that require monitoring at the workplace:

Silicon

	mg/m ³
ACGIH TLV	10
Belgium TWA	10
Denmark TWA	10
France VME	10
Ireland TWA	5 (respirable); 10 (inhalable)
Korea TLV	10
Netherlands MAC-TGG	10
Norway TWA	10
Switzerland MAK-W	4
United Kingdom TWA	4 (respirable dust); 10 (total inhalable dust)
USA PEL	5 (respirable fraction); 15 (total dust)

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Additional information: No data**Personal protective equipment****General protective and hygienic measures**

The usual precautionary measures for handling chemicals should be followed.

Breathing equipment: Not required.**Protection of hands:** Not required.**Eye protection:** Safety glasses**Body protection:** Protective work clothing.**9 Physical and chemical properties:****General Information**

Form:	Plate
Color:	Dark grey
Odor:	Odorless

Change in condition**Melting point/Melting range:** 1410°C (2570°F)**Boiling point/Boiling range:** 2355°C (4271°F)**Sublimation temperature / start:** Not determined**Flash point:** Not applicable**Flammability (solid, gaseous)** Product is not flammable.
Fine powder: flammable**Ignition temperature:** Not determined**Decomposition temperature:** Not determined**Danger of explosion:** Product does not present an explosion hazard.**Explosion limits:****Lower:** Not determined**Upper:** Not determined**Vapor pressure:** Not determined**Density at 20°C (68°F):** 2.329 g/cm³**Solubility in / Miscibility with**
Water: Insoluble**10 Stability and reactivity****Thermal decomposition / conditions to be avoided:**

Decomposition will not occur if used and stored according to specifications.

Materials to be avoided:

Oxidizing agents

Halogens

Dangerous reactions No dangerous reactions known**Dangerous products of decomposition:**

Metal oxide fume

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Silicon oxide

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11 Toxicological information

Acute toxicity:

LD/LC50 values that are relevant for classification:

Oral	LD50	3160 mg/kg (rat)
Irritation of eyes	mild	3 mg (rabbit)

Primary irritant effect:

on the skin: Powder: irritant effect

on the eye: Powder: irritant effect

Sensitization: No sensitizing effects known.

Subacute to chronic toxicity:

Subacute to chronic toxicity:

The Registry of Toxic Effects of Chemical Substances (RTECS) reports the following effects in laboratory animals:

Sense Organs and Special Senses (Olfaction) - effect, not otherwise specified.

Sense Organs and Special Senses (Eye) - effect, not otherwise specified. Lungs, Thorax, or Respiration - respiratory stimulation.

Subacute to chronic toxicity:

Elementary silicon is an inert material that seems to have little adverse effect on lungs and does not appear to produce significant organic disease or toxic effects when exposures are kept under reasonable control.

Additional toxicological information:

To the best of our knowledge the acute and chronic toxicity of this substance is not fully known.

No classification data on carcinogenic properties of this material is available from the EPA, IARC, NTP, OSHA or ACGIH.

12 Ecological information:

General notes:

Do not allow material to be released to the environment without proper governmental permits.

13 Disposal considerations

Product:

Recommendation

Consult state, local or national regulations to ensure proper disposal.

Uncleaned packagings:

Recommendation: Disposal must be made according to official regulations.

14 Transport information

Not a hazardous material for transportation.

DOT regulations:

Hazard class: None

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Land transport ADR/RID (cross-border)
ADR/RID class: None**Maritime transport IMDG:**
IMDG Class: None**Air transport ICAO-TI and IATA-DGR:**
ICAO/IATA Class: None**Transport/Additional information:**
Not dangerous according to the above specifications.**15 Regulations****Product related hazard informations:**
Observe the general safety regulations when handling chemicals**National regulations**
All components of this product are listed in the U.S. Environmental Protection Agency Toxic Substances Control Act Chemical substance Inventory.
All components of this product are listed on the Canadian Domestic Substances List (DSL).**Information about limitation of use:**
For use only by technically qualified individuals.**16 Other information:**

Employers should use this information only as a supplement to other information gathered by them, and should make independent judgement of suitability of this information to ensure proper use and protect the health and safety of employees. This information is furnished without warranty, and any use of the product not in conformance with this Material Safety Data Sheet, or in combination with any other product or process, is the responsibility of the user.

Department issuing MSDS: Health, Safety and Environmental Department.
Contact: Paul V. Connolly

USA