FUJI SILYSIA CHEMICAL LTD.

FAX NO. +81-568-51-8557

2-1846 KOZOJI-CHO, KASUGAI, AICHI, 487-0013 JAPAN

MATERIAL SAFETY DATA SHEET

No. SMK-001-001-E

Revised date: May 20, 2010

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1. The Chemical Substance and Company Information

Names of chemical substance

Product name

SYLOMASK

Grade

52 / 55

Company's name

Fuji Silysia Chemical Ltd.

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Recommended use and restriction of use

Recommended use

Anti-corrosive pigment

Lmitation of usage

2. Hazards identification

GHS classification

Health hazards

Physicochemical hazards

Flammable solids not classified Pyrophoric solids not classified Self-heating substances and mixtues not classified

Substances and mixtures which, in

comtact with water, emitflammable not classified

gases.

Oxidizing solids not classified
Acute toxicity -oral not classified

Acute toxicity -dermal not classified

Acute toxicity -inhalation : dust classification not possible Acute toxicity -inhalation : mist classification not possible

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Skin corrosive / irritation category 2
Eye damage / irritation category 1

Sensitization-respiratory classification not possible Sensitization-skin classification not possible

Germ cell mutagenicity not classified Carcinogenicity not classified

Toxic to reproduction classification not possible Specific target organ systemic toxicity category 1(respitatory system)

(single exposure)

Specific target organ systemic toxicity category 2(lung)

(repeated exposure)

Environmental hazards

Label elements

Pictogram or symbol





Signal Word

Hazard statement

Danger

Causes skin irritation

Causes serious eye damage Causes respiratory damage

May cause damage to lung through prolonged

or repeated exposure

Precautionary statement

[Precaution]

Wear protective gloves.

Wash hands thoroughly after handling.

Wear eye/face protection.

Do not eat, drink or smoke when using this product.

Do not breathe dust.

[Correspondence]

If on skin: Wash with plenty of soap and water.

Take off contaminated clothing and wash before reuse.

If skin irritation occurs, get medical advice/attention.

If in eyes:

Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do.

Continue rinsing.

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If eye irritation persists, get medical advice/attention.

If exposed: Call apoison centre or doctor/physician.

Get medical advice/attention if you feel unwell.

[Storage]

Store locked up.

[Disposal]

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

Country / area information

3. Composition / Information on Ingredients

Chemical characterization	Mixture	
Chemical name or generic name	Amorphous silicon dioxide	Calcium hydroxide
Alias	Silica gel	Slaked lime
Chemical formula	SiO_2	Ca(OH)2
CAS registered No.	7631-86-9	1305-62-0
Official gazette No.	(1)-548	(1)-181
A purity or a range	88~90%	10~12%

4. First Aid Measure

IF INHALED Remove to fresh air and keep at rest in a position comfortable

for breathing ..

Get medical advice/attention if you feel unwell.

IF ON SKIN Wash exposed area with plenty of water and soap.

Take off contaminated clothing and wash before reuse.

If skin irritation occurs, get medical advice/attention.

IF IN EYES Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do.

Continue rinsing.

Immediately call a poison centre or doctor/physician.

IF SWALLOWED Linse mouth with clean water well.

Get medical advice/attention if you feel unwell.

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5. Fire Fighting Measure

Extinguish

Use extinguish agents appropriate for surrounding fire.

Special hazards

Special fire extinguishing method Protection of a person to extinguish

a fire

Wear appropriate respiratory protection or chemical protective

clothing for surrounding fire.

6. Accidental Release Measure

Instructions for the human body,

Protective equipment and emergency step

Immediately isolate hazard area and deny entry to unnecessary personel.

Wear appropriate protection to avoid contact/inhalation to eyes and

skin.

(ref. "8. Exposure Control/Personal Protection")

Instructions for the environment

Do not discharge it to environment.

Collection, neutralization

Vacuum spillage and into an empty container and dispose them later as

an industrial waste.

Preventive measures against second disaster

Residue on the floor may cause slip, clean up diligently.

7. Handling and Storage

Handling

Technical measures

Do the equipment measures in the "8.Exposure Control/

Personal Protection ", and wear the protection.

Local / general ventilation

Do the local and general ventilation in the

"8.Exposure Control/Personal Protection".

Safe handling instructions

Take precautionary measures against static discharge.

Do not contact, inhale or swallow.

Perform ventilation for exhaust to keep the atmospheric

concentration lower than exposure limit.

Wash thoroughly after handling.

Contact evasion

Refer to the "10. Stability and reactivity".

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Storage

Technical Measures Instal lighting and ventilation to store and handle.

Composite hazard substance Refer to the "10. Stability and reactivity ".

Storage condition Store in a cool/well-ventilated place to protect from sunlight and

rainwater.

Store locked up.

Container and packaging materials

Store it in tightly closed container which is

not breakable.

8. Exposure Control/ Personal Protection

Standard control concentration No setting

Permissible concentration:

(an exposure limit value/ a biological exposure index)

Japan industrial hygiene society (2008)

Amorphous silicon dioxide Calcium hydroxide

Total dust 8 mg/m^3 4 mg/m^3 Inhalation-related dust 2 mg/m^3 1 mg/m^3

ACGIH(2009)

TLX-TWA No setting 5 mg/m³

Equipment measure Install washing eyes device in a workplace to store this

material or handle it.

Install a ventilating device to keep an air pollutant less

than permissible concentration when dust occurs by a process.

Protective equipment

Protection for respiratory Wear appropriate respiratory protection.

Protection for hands Wear appropriate protective gloves.

Protection for eyes Use eye protection.

Protection for skin and body Use the appropriate protection suit and mask.

Hygiene measure Wash hands thoroughly after handling.

Do not eat, drink or smoke when using this product.

9. Physical and Chemical Properties

Physical State/Shape/Color... Free flow white powder

Odor Odorless

pH $9.0 \sim 9.6 \, (5\% \, \text{slurry})$

Melting Point No data Boiling Point No data

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Flash point Not flammable
Pyrophoric temperature Not flammable
Explosion range Not flammable

Vapor Pressure No data

[Conversion value 1333Pa(1732 ℃)]

Vapor Density (Air =1) No data Specific Gravity 1.8

Solubility No data
Octanol / water distributed coefficient No data
Decomposition temperature No data

10. Stability and Reactivity

Stability Calcium hydroxide: Readily absorbs carbon dioxide from air

forming calcium carbonate.

Hazard reaction possibility Silicon dioxide: On reacting with hydrogen fluoride, forms

silicon fluoride(gas).

Condition to avoid Contact with composite hazard substance

Composite hazard substance Hydrogen fluoride

Hazard resolution substance Non

11. Toxicological Information

Acute Toxicity

Oral LD₅₀ value of ingestion administration test(rat) in IUCLID:

Silicon dioxide is >5,000mg/kg. Calcium hydroxide is 7,340mg/kg.

Dermal LD₅₀ value of skin administration test (rabit) in IUCLID:

Silicon dioxide is > 5,000 mg/kg.

Calcium hydroxide: No information available

Skin corrosion / irritation Rabit test in IUCLID:

Silicon dioxide does not cause irritation.
Calcium hydroxide does not cause irritation.

In MSDS of calcium hydroxide:

Calcium hydroxide may cause skin irritation/inflammation.

Serious eye damage / Human test in IUCLID:

irritation Silicon dioxide causes slight irritation.

Rabit test in IUCLID:

Calcium hydroxide: corrosive

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Respiratory / skin sensitizer Not Available

Germ cell mutagenicity

In vivo marrow micronucleus test(mouse)

Silicon dioxide : negative

Calcium hydroxide: No information available

Carcinogenivity

IARC category

Silicon dioxide: category 3

Calcium hydroxide: No information available

Toxic to reproduction toxicity Not Available

Specific target organ systemic toxicity

(single exposure)

In MSDS of calcium hydroxide:

Calcium hydroxide: Category 1(respiratory system)

Silicon dioxide: No information available

Specific target organ systemic toxicity

(repeated exposure)

In MSDS of calcium hydroxide:

Calcium hydroxide: Category 2(lung) Silicon dioxide: No information available

12. Environmental influence information

Hazardous to the aquatic environment- acute hazard

Not available

Hazardous to the aquatic environment-chronic hazard2

Not available

13. Disposal Considerations

Leftover waste

The disposal of the leftover waste has to be carried out in

accordance with the legal requirements.

A pollution container and packing

Clean a container and recycle it, or

appropriate disposal must be made according to official regulations. When an empty container is disposed, completely remove contents.

14. Transportation Information

International regulation

Marine regulation information

Non-hazardous material

Air regulation information

Non-hazardous material

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Special safety measures

On the occasion of the transportation, load it to avoid direct rays of the sun, the damage of a container, corrosion and leaking and be surely prevention of collapse of cargo. Do not pile the heavy goods up on the top.

15. Regulatory Information

16. Other Information

Fuji Silysia Chemical Ltd. provides the information contained herein in good faith but makes no representation as to its comprehensiveness or accuracy. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product. Individuals receiving the information must exercise their independent judgment in determining its appropriateness for a particular purpose.

References

IUCLID (2000)
IARC (2006)
Industrial hygiene society advice (2008)
ACGIH-TLV (2009)

A disaster example

No information

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