

Material Name: Synthetic Fused Silica

Date of issue: 27/06/2024

SDS No: AQ-CLEN-00

Revision date: 27/06/2024

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878

1 Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Product form: Substance

Product name: Synthetic Fused Silica

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

1.2.1 Relevant identified uses

Use of the substance/mixture: Optical components and jigs for semiconductor manufacturing, medical optical materials, etc.

1.2.2 Uses advised against

It is a brittle material and must not be subjected to strong impact force.

1.3 Details of the supplier of the safety data sheet

Company name AGC Inc.

Address 1-5-1, Marunouchi, Chiyoda-ku, Tokyo 100-8405 Japan

Responsible department Lithography Products Unit
Advanced Materials Division

Telephone number +81-3-3218-5899

FAX number +81-3-3218-7862

1.4 Emergency telephone number

+81-3-3218-5899 (9:00~17:00 JAPAN TIME)

2 Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Not classified

Adverse physicochemical, human health and environmental effects

To our knowledge, this product does not present any particular risk, provided it is handled in accordance with good occupational hygiene and safety practice.

2.2 Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

No labelling applicable

2.3 Other hazards

No additional information available

3 Composition/information on ingredients

3.1 Substances

Name of substance Silicon dioxide

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Identifiers

CAS-No. 60676-86-0

EC-No. 262-373-8

3.2 Mixtures

Not applicable

4 First aid measures

4.1 Description of first aid measures

First-aid measures after cut: Disinfect immediately and administer first aid such as stopping bleeding.

Get medical advice/attention if necessary.

First-aid measures after inhalation: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

Get medical advice/attention if you feel unwell.

First-aid measures after skin contact: Get medical advice/attention if you feel unwell.

First-aid measures after eye contact: Get medical advice/attention from an ophthalmologist if you feel unwell.

First-aid measures after ingestion: Get medical advice/attention if you feel unwell.

Precautions necessary to protect those providing first aid: Inform medical staff about the substance and make sure they are aware of their own protective measures.

Special notes for physicians: Treat according to symptoms.

5 Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media: Synthetic fused silica is nonflammable, but combustible packaging materials are sprayed with powder, foam, carbon dioxide, or water.

Unsuitable extinguishing media: Nothing special

5.2 Special hazards arising from the substance or mixture

Hazardous decomposition products in case of fire: There is a risk of emitting irritating, corrosive and/or toxic gases in the event of a fire.

5.3 Advice for firefighters

Unique fire extinguishing method: Move containers from fire area if it is safe to do so. Be careful not to cause environmental pollution by spilling fire extinguishing water or dilution water.

Protection during firefighting: Wear appropriate protective equipment and perform from

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upwind whenever possible.

6 Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedure

Workers should wear appropriate protective equipment (see section 8: Exposure controls/personal protection) and work from upwind.

Immediately isolate the leak area an appropriate distance in all directions.

Entrance by anyone other than those involved is prohibited.

6.2 Environmental precautions

Avoid release to the environment.

6.3 Methods and material for containment and cleaning up

Stop the leak if you can do it safely.

Collect as much spilled material as possible.

6.4 Reference to other sections

For further information refer to section 13.

7 Handling and storage

7.1 Precautions for safe handling

Personal precautions, protective equipment and emergency procedure: Workers should wear appropriate protective equipment (see section 8: Exposure controls/personal protective measures) and work from upwind.

For the time being, isolate appropriate distances in all directions as leakage areas.

Entrance by anyone other than those involved is prohibited.

Environmental precautions: Avoid release to the environment.

7.2 Conditions for safe storage, including any incompatibilities

Storage conditions: Store in a secure condition to avoid turnover.
Pay attention to damages of the packaging and contamination.

7.3 Specific end use(s)

No additional information available

8 Exposure controls/personal protection

8.1 Control parameters

No additional information available

8.2 Exposure controls

No additional information available

Appropriate engineering Ensure good ventilation of the work station.

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controls:

Hand protection:	Wear protective gloves.
Eye protection:	Wear eye and face protective equipment.
Skin and body protection:	Wear appropriate protective clothing.
Respiratory protection:	Wear a dust mask if operation produces fine powder.
Environmental exposure	Avoid release to the environment.

controls:

9 Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical condition/color	Solid, colorless and transparent
Odor	No data available
Melting point/freezing point	1610 deg-C
Boiling point or initial boiling point and boiling point range	No data available
Flammability	No data available
Lower explosive limit and upper explosive limit/flammability limit	Incombustibility
Flash point	Incombustibility
Spontaneous ignition point	Incombustibility
Decomposition temperature	No data available
pH	No data available
Kinematic viscosity	No data available
Solubility	Insoluble in water Soluble in hydrofluoric acid and alkaline aqueous solution
n-octanol/water partition coefficient (log value)	No data available
Vapor pressure	0 mmHg (20 deg-C)
Density and/or relative density	2.2 (g/cm ³)
Relative gas density	No data available
Particle properties	No data available
Other data	Volatility: None (room temperature)

9.2 Other information

No additional information available

10 Stability and reactivity

10.1 Reactivity

Poor reactivity in block shape.

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10.2 Chemical stability

Stable under normal conditions.

10.3 Possibility of hazardous reactions

No data available

10.4 Conditions to avoid

Fine powder produced during polishing and processing can cause explosion from reaction with strong oxidizing substances.

10.5 Incompatible materials

Fine powder produced during polishing and processing can cause explosion from reaction with strong oxidizing substances.

10.6 Hazardous decomposition products

No data available

11 Toxicological information

Acute toxicity

Oral: No information available

Dermal: No information available

Inhalation: No information available

Skin corrosion/irritation: No information available

Serious eye damage/irritation: No information available

Respiratory sensitization: No information available

Skin sensitization: No information available

Germ cell mutagenicity: No information available

Carcinogenicity: No information available

Reproductive toxicity: No information available

STOT-single exposure: No information available

STOT-repeated exposure: No information available

Aspiration hazard: No information available

12 Ecological information

12.1 Toxicity

Ecology - general: No information available

Acute aquatic toxicity: No information available

Chronic aquatic toxicity: No information available

12.2 Persistence and degradability

Persistence and degradability: No information available

12.3 Bioaccumulative potential

Bioaccumulative potential: No information available

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12.4 Mobility in soil

Ecology - soil: No information available

12.5 Results of PBT and vPvB assessment

No additional information available

12.6 Other adverse effects

Other adverse effects: No information available

13 Disposal considerations

13.1 Waste treatment methods

Waste treatment methods: Dispose of contents/container in accordance with licensed collector's sorting instructions.

14 Transport information

In accordance with ADR / RID / IMDG / IATA / AND

ADR	IMDG	IATA	ADN	RID
14.1 UN number				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.2 UN proper shipping name				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.3 Transport hazard class(es)				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.4 Packing group				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.5 Environmental hazards				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
No supplementary information available				

14.6 Special precautions for user

Overland transport: Not applicable
Transport by sea: Not applicable
Air transport: Not applicable
Inland waterway transport: Not applicable
Rail transport: Not applicable

14.7 Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable

15 Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the

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substance or mixture

15.1.1 EU-Regulations

Contains no REACH substances with Annex XVII restrictions

Contains no substance on the REACH candidate list

Contains no REACH Annex XIV substances

Directive 2012/18/EU (SEVESO III)

Seveso Additional information: Not subject to the Seveso III Directive

15.2 National regulations

No additional information available

15.3 Chemical safety assessment

No chemical safety assessment has been carried out.

16 Other information

No additional information available

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.
