

**Identification of the substance or preparation:**

Silicon dioxide

Revision date: 29.11.2010 / 29.11.2010 Date of printing: 14.12.2010

**Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH)****1. Identification of the substance/preparation and of the company/undertaking****Identification of the substance or preparation:****Silicon dioxide**

**Use of the substance/preparation:** Dessicant  
**Revision date:** 29.11.2010 / 29.11.2010  
**Supplier (manufacturer/importer/  
downstream user/distributor):** TOYOTA KAKO Co.,LTD

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**2. Hazards identification****Hazard designation:**

This substance is not classified as dangerous according to 67/548/EEC.

This substance is not classified as dangerous according to regulation (EC) 1272/2008 [CLP].

**Critical hazard to man and environment:**

No risks worthy of mention. Please observe the information on the safety data sheet at all times.

**3. Composition/information on ingredients****Chemical characterization (preparation):**

Silicon dioxide, SiO<sub>2</sub> x nH<sub>2</sub>O

The EC-Number 231-545-4 covers following two CAS-Numbers: CAS# 112926-00-8 and CAS# 7631-86-9

**Dangerous ingredients:**

CAS-No.	EC-no.	Chemical term	of (%)	up to (%)	Unit/ Content	Dan ger sym bol(s)	Dan ger sym bol(s)	Dan ger sym bol(s)	Dan ger sym bol(s)	R phrases	INDEX no.
00-00-0	231-545-4	Silicia amorphous, precipitated	95	100	%	-					

**Full text of R-phrases: see section 16.**

**4. First aid measures****General information:**

If victim is at risk of losing consciousness, position and transport on their side.

**Following inhalation:**

Provide fresh air.

**After skin contact:**

After contact with skin, wash immediately with plenty of water and soap.

**Following eye contact:**

Rinse immediately carefully and thoroughly with eye-bath or water.

In case of troubles or persistent symptoms, consult an ophthalmologist.

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Do not induce vomiting.

If major quantities of dust are swallowed or inhaled, immediately drink:

Water.

**5. Fire fighting measures****Suitable extinguishing media:**

The product itself is not combustible.

Extinguishing materials should be selected according to the surrounding area.

**Extinguishing media which must not be used for safety reasons:**

None

**Special exposure hazards arising from the substance itself, combustion products, resulting gases:**

None

**Additional information:**

The product itself is not combustible.

**6. Accidental release measures****Personal precautions:**

See protective measures under point 7 and 8.

**Environmental precautions:**

No special environmental protection measures are necessary.

**Methods for cleaning up:**

Collect mechanically.

**7. Handling and storage****Handling:****Information for safe handling:**

Do not breathe dust.

**Precautions against fire and explosion:**

None

**Storage:****Requirements for storerooms and containers:**

Keep container tightly closed.

Keep/Store only in original container.

**Information about storage in one common storage facility:**

None

**Further information concerning storage conditions:**

None

**Storage class:** 13**8. Exposure controls / Personal protection equipment****Exposure limit values:****Technical measures:**

Avoid generation of dust.

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## Components with workplace or biological limit values to be monitored:

## Exposure limit values:

CAS-No.	Chemical term	AGW (DE)	Unit	ppm	Limitation of exposure peaks	Remark
00-00-0	Silica amorphous, precipitated	3	mg/m <sup>3</sup>		2	AGS

## Remarks:

E: einatembare Staubfraktion

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## Personal protection equipment:

**Respiratory protection:** Respiratory protection required in case of:

In the case of the formation of dust.

Suitable respiratory protective equipment: particulates filter device (DIN EN 143).

**Hand protection:** Hand protection: not required.**Eye protection:** Eye protection: not required.**Skin protection:** Skin protection: not required.**General protection and hygiene measures:**

Do not eat, drink, smoke or sneeze at the workplace.

Wash hands before breaks and at the end of work.

## 9. Physical and chemical properties

## General information:

**State of matter:** Powder  
**Paint:** white  
**Odour:** odourless

## Important health, safety and environmental information:

	Unit	Method
pH:		not applicable
Boiling temperature / boiling range:		not applicable
Melting point / melting range:		not applicable
Flash point (°C):		not applicable
Explosion limits (LEL, UEL):		not applicable
Flammability:	not applicable	
Self-igniting:	not applicable	
Oxidizing characteristics:	not applicable	
Explosivity:	not applicable	
Vapour pressure:		not applicable
Density:	2.1 g/cm <sup>3</sup>	
Solubility in water (g/l):	0 g/l	
Distribution coefficient (n-octanol / water) (log P O/W):		not applicable
Viscosity:		not applicable

## 10. Stability and reactivity

## Conditions to avoid:

None

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Reacts with : Fluorhydric acid. (HF)

**Hazardous decomposition products:**

None

**11. Toxicological information****Irritation and etching:**

Irritant effect on the skin: Not an irritant.

Irritant effect on the eye: slightly irritant but not relevant for classification.

Irritant effect on the respiratory tract: May cause respiratory irritation.

**Sensitization:**

no danger of sensitization.

**Repeated dose toxicity:**

not known

**CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction):**

not known

**Observations relevant to classification:**

not known

**12. Ecological information****Persistence and Biodegradation:****Method:**

Mechanical separation in a purification plant is possible.

**Ecotoxicity:****Aquatic toxicity:**

not applicable

**Terrestrial toxicity:**

not applicable

**Effects in sewage plants:**

not applicable

**13. Disposal considerations****Appropriate disposal/Product:****Recommendation:**

Consult the local waste disposal expert about waste disposal.

**Waste designation:** minerals (for example sand, stones)**Waste key product:** 19 12 09**Waste designation:** minerals (for example sand, stones)**Waste key product:** 19 12 09**Contaminated packaging:****Recommendation:**

Consult the local waste disposal expert about waste disposal.

**Waste designation:** municipal wastes not otherwise specified**Waste key packaging:** 20 03 99**14. Transport information****Overland transport (ADR/RID)****Official directive for the transport:** Not a hazardous material with respect to these transportation regulations.

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**Transport by sea (IMDG)****Proper Shipping Name:** Not a hazardous material with respect to these transportation regulations.**Air transport (ICAO-TI / IATA-DGR)****Proper Shipping Name:** Not a hazardous material with respect to these transportation regulations.**Additional information:** Not a hazardous material with respect to these transportation regulations.**15. Regulatory information****Labelling (67/548/EEC or 1999/45/EC):****S phrases:**

S phrases	
S22	Do not breathe dust.

**Hazardous component(s) for labelling:**

not applicable

**Special labelling of particular preparations:**

not applicable

**National regulations:****Störfallverordnung:**

Unterliegt nicht der StörfallV.

**Betriebssicherheitsverordnung (BetrSichV):** -**Wassergefährdungsklasse:** - **Quelle:** Anh. 1**Technische Anleitung Luft (TA-Luft):****Klasse:**            **Ziffer:**

-                            -

**Other regulations (EU):**

Unterliegt nicht der TA-Luft.

**16. Other information****Data sources:**

Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH).

Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures

Council Directive 67/548/EEC of 27 June 1967 on the approximation of laws, regulations and administrative provisions relating to the classification, packaging and labelling of dangerous substances

Directive 1999/45/EC of the European Parliament and of the Council of 31 May 1999 concerning the approximation of the laws, regulations and administrative provisions of the Member States relating to the classification, packaging and labelling of dangerous preparations

Council Directive 98/24/EC of 7 April 1998 on the protection of the health and safety of workers from the risks related to chemical agents at work

**Application restrictions:**

none/none

**Further remarks:**

The above information describes exclusively the safety requirements of the product and is based on our present -day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

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Data sources: Data arise from reference works and literature. Data rely on practical experience.

**Further remarks:**

Engineering Department

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**\* Data changed from previous versions**

Documentation of changes: