



Material Safety Data Sheet

According to Regulation (EC) No 1907/2006, Annex II, Amended by

COMMISSION REGULATION (EU) 2015/830,

According to REGULATION (EC) No 1272/2008

Silica gel

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

- 1.1 Product identifier: REACH registration No.:
Identification on the label/Trade name: Silica gel
Additional identification: Silicon dioxide
Identification of the product: CAS#112926-00-8; EC#231-545-4
Index Number: Not available
Not available
- 1.2 Relevant identified uses of the substance or mixture and uses advised against:
- 1.2.1 Identified uses:
Dry and adsorption.
- 1.2.2 Uses advised against:
Not available.
- 1.3 Details of the supplier of the safety data sheet:

Supplier: WHC GmbH
Address: Steinerne Furt 90
86167 Augsburg
www.chemdiscount.de
Contact person(E-mail): info@whc-gmbh.eu
Telephone: +49 821 45523773
Fax: +49 821 45523773

Section 2 Hazards identification

2.1 Classification of the substance or mixture:

2.1.1 Classification:

The substance is classified as following according to REGULATION (EC) No 1272/2008:

REGULATION (EC) No 1272/2008	
Hazard classes/Hazard categories	Hazard statement
STOT RE 1	H372

For full text of H- phrases: see section 2.2.

2.2 Label elements:

Hazard Pictograms:

Signal Word(S):
Hazard Statement:

H372: Causes damage to organs through prolonged or repeated exposure

Precautionary statement:

P260: Do not breathe dust/fume/gas/mist/vapours/spray.

P264: Wash hands thoroughly after handling.

P270: Do not eat, drink or smoke when using this product.

P314: Get medical advice/attention if you feel unwell.

P501: Dispose of contents/container in accordance with local regulations.

2.3 Other hazards:

EUH014: Reacts violently with water.

Section 3 Composition/information on ingredients

Substance/Mixture:

Substance

Subingredient(s):

Chemical Name	Registration No.	CAS No.	EC No.	Concentration
Silicon dioxide	N/A	112926-00-8	231-545-4	99.03%
Iron dioxide	N/A	1332-37-2	215-570-8	0.25%
Calcium dioxide	N/A	1305-78-8	215-138-9	0.25%
sodium dioxide	N/A	1313-59-3	215-208-9	0.22%
Aluminum dioxide	N/A	1344-28-1	215-691-6	0.19%
potassium dioxide	N/A	12136-45-7	235-227-6	0.06%

Section 4 First aid measures

4.1 Description of first aid measures:

4.2 Indication of any immediate medical attention and special treatment needed:

If skin irritation or rash occurs, get medical advice/attention.

Section 5 Firefighting measures

5.1 Extinguishing media:

Suitable extinguishing media:

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Unsuitable extinguishing media:

Not available.

5.2 Special hazards arising from the substance or mixture

Emits toxic fumes under fire conditions.

5.3 Advice for firefighters:

Wear self contained breathing apparatus for fire fighting if necessary.

Section 6 Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures:

6.1.1 For non-emergency personnel: Avoid dust formation. Ensure adequate ventilation. Evacuate personnel to safe areas.

6.1.2 For emergency responders: Wear an appropriate NIOSH/MSHA approved respirator if dust is generated.

6.2 Environmental Precautions: Do not let large amount of product enter drains.

6.3 Methods and material for Containment and Cleaning up: Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

6.4 Reference to other sections: See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.
See Section 13 for information on disposal.

Section 7 Handling and storage

7.1 Precautions for safe handling:

7.1.1 Protective measures: Provide appropriate exhaust ventilation at places where dust is formed.

7.1.2 Advice on general occupational hygiene: Do not eat, drink and smoke in work areas. Wash hands after use. Remove contaminated clothing and protective equipment before entering eating areas.

7.2 Conditions for safe storage, including any incompatibilities: Store in cool place. Keep container tightly closed in a dry and well-ventilated place.

7.3 Specific end use(s): Not applicable.

Section 8 Exposure Controls/Personal Protection

8.1 Control parameters:

8.1.1 Occupational exposure limits:

Country	Substance	EINECS No.	CAS No.	Occupational Exposure Limit Value (8-hour reference period)		Occupational Exposure Limit Value (15-minute reference period)		
				PPm	mg/ m3	PPm	mg/ m3	Note
Ireland	Quartz, respirable dust, (see crystalline silica)	238-878-4	14808-60-7	-	0.1	-	-	-
Ireland	Aluminium oxides; total inhalable dust respirable dust	215-691-6	1344-28-1	-	10 4	-	-	-
Ireland	Calcium oxide	215-138-9	1305-78-8	-	2	-	-	-

8.1.2 Additional exposure limits under the conditions of use: Not available.

8.1.3 DNEL/DMEL and PNEC-Values: Not available.

8.2 Exposure controls:

8.2.1 Appropriate engineering controls: Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. If user operations generate dust, fumes or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

8.2.2 Individual protection measures, such as personal protective equipment:

Eye/face protection: Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Hand protection: Handle with gloves. Full contact or Splash contact: Material: Nitrile rubber,

Minimum layer thickness: 0.11 mm, Break through time: 480 min.

Body protection:

Complete suit protecting against chemicals, The type of protective equipment

must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection:

Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N99 (US) or type P2 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Thermal hazards:

Wear suitable protective clothing to prevent heat.

8.2.3 Environmental exposure controls:

Avoid discharge into the environment.

According to local regulations, Federal and official regulations.

Section 9 Physical and chemical properties

Appearance:	Grain, powder
Colour:	White
Odour:	Odorless
Odour threshold:	Not available
pH:	Not available
Melting point/range (°C):	1610 °C-lit.
Boiling point/range (°C):	Not available
Flash point (°C):	Not available
Evaporation rate:	Not available
Flammability limit - lower (%):	Not available
Flammability (solid, gas):	Non-flammable
Ignition temperature (°C):	Not available
Upper/lower explosive limits:	Not available
Vapour pressure (20°C):	Not available
Vapour density:	Not available
Relative Density:	2.6 at 25 °C
Bulk density (kg/m³):	Not available
Water solubility (g/l):	Not available
n-Octanol/Water (log Po/w):	Not available
Auto-ignition temperature:	Not available
Viscosity, dynamic (mPa.s):	Not available
Explosive properties:	Non explosive
Oxidising properties:	Not available
Molecular Formula:	SiO ₂
Molecular Weight:	60.0843

9.2. Other information:

Fat solubility(solvent-oil to be specified)

etc:

9.1 Information on basic physical and chemical properties:



Surface tension:	Not available
Dissociation constant in water(pKa):	Not available
Oxidation-reduction Potential:	Not available

Section 10 Stability and reactivity

10.1	Reactivity:	The substance is stable under normal storage and handling conditions.
10.2	Chemical stability:	Stable at room temperature in closed containers under normal storage and handling conditions.
10.3	Possibility of hazardous reactions:	No dangerous reactions known.
10.4	Conditions to avoid:	Incompatible materials.
10.5	Incompatible materials:	Hydrogen fluoride
10.6	Hazardous decomposition products:	Silicon oxides, Metal oxides.

Section 11 Toxicological information

11.1	Information on toxicological effects:	
	Acute toxicity:	
	LD50(Oral, Rat):	Not available
	LC50(Inhalation, Rat):	Not available
	LD50(Dermal, Rabbit):	Not available
	Skin corrosion/Irritation:	Not classified
	Serious eye damage/irritation:	Not classified
	Respiratory or skin sensitization:	Not classified
	Germ cell mutagenicity:	Not classified
	Carcinogenicity:	Not classified
	Reproductive toxicity:	Not classified
	STOT- single exposure:	Causes damage to organs through prolonged or repeated exposure
	STOT-repeated exposure:	Not classified
	Aspiration hazard:	Not classified

Section 12 Ecological information

12.1	Toxicity:	
	Acute (short-term) toxicity:	
	LC50(96h, Fish):	Not available
	LC50(48h, Crustacea):	Not available
	EC50(72h, Algae/aquatic plants):	Not available
	Chronic (long-term) toxicity:	

NOEC(Fish): Not available

NOEC(Crustacea): Not available

EC50(Algae/aquatic plants): Not available

12.2 Persistence and degradability: Not available.

12.3 Bioaccumulative potential: Not available.

12.4 Mobility in soil: Not available.

12.5 Results of PBT and vPvB assessment: Not available.

12.6 Other adverse effects: Not available.

Section 13 Disposal considerations

13.1 Waste treatment methods: Any disposal practice must be in compliance with all local and national laws and regulations. Do not dump into any sewers, on the ground, or into any body of water.

Section 14 Transport information

	Land transport (ADR/RID)	Inland waterways (ADN)	Sea transport (IMDG)	Airtransport (ICAO/IATA)
UN number	Not regulated	Not regulated	Not regulated	Not regulated
UN Proper shipping name	Not regulated	Not regulated	Not regulated	Not regulated
Transport hazard Class(es)	Not regulated	Not regulated	Not regulated	Not regulated
Packing group	Not regulated	Not regulated	Not regulated	Not regulated
Environmental hazards	No	No	No	No
Special precautions for user	See section 2.2	See section 2.2	See section 2.2	See section 2.2
Transport in bulk according to Annex II of Marpol and the IBC Code	Not regulated	Not regulated	Not regulated	Not regulated
Conclusion	ADR/RID/ADN/IMDG/ICAO/IATA not regulated.			

Section 15 Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture:

Relevant information regarding authorization: Not applicable.

Relevant information regarding restriction: Not applicable.

Other EU regulations: Employment restrictions concerning young person must be observed.

For use only by technically qualified individuals.

Other National regulations:

Not applicable

Section 16 Other information

16.1 Indication of changes:

Version 1.0 Amended by (EU) 2015/830

16.2 Abbreviations and acronyms:

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road

RID: Regulation for rail International transportation of Dangerous goods
ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways

IMDG: Code international maritime dangerous goods code

ICAO: International Civil Aviation Organization

IATA: International Air Transport Association

LC50: median lethal concentration EC50: The effective concentration of substance that causes 50% of the maximum response. NOEC:

No Observed Effect Concentration

DNEL: derived no-effect level

. PNEC: predicted no-effect concentration

16.3 Key literature references and sources for data

ECHA Registered substances data

16.4 Classification and procedure used to derive the classification for mixtures according to Regulation (EC)

1272/2008 [CLP]

Classification according to Regulation (EC) No. 1272/2008		Classification procedure
STOT RE 1	H372	On basis of test data

16.5 Relevant H-statements (number and full text):

H372: Causes damage to organs through prolonged or repeated exposure

EUH014: Reacts violently with water.

16.6 Training instructions:

Not applicable.

16.5 Further information:

This information is based upon the present state of our knowledge. This SDS has been compiled and is solely intended for this product. The information of section 3 and section 9 is provided by: QINGDAO HENGZE SILICA GEL PRODUCTS CO., LTD. Other information is from authoritative database and expert assessment(010-129452).

16.6 Notice to reader:

Employers should use this information only as a supplement to other information gathered by them, and should make independent judgment 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 Safety Data Sheet, or in combination with any other product or process, is the responsibility of the user.