

Safety data sheet according to 1907/2006/EC, Article 31

revised on: 14.06.2023

Version number 3 (replaces version 2)

Creation Date: 18.10.2019

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

· 1.1 Product identifier

· **Trade name:** Silica gel

· **Article number:** 1605, 1620

· **CAS Number:**

7631-86-9

· **EC number:**

231-545-4

· **Registration number** 01-2119379499-16-XXXX

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

· **Sector of Use**

SU0 Other

SU1 Agriculture, forestry, fishery

SU2a Mining, (without offshore industries)

SU2b Offshore industries

SU3 Industrial uses: Uses of substances as such or in preparations at industrial sites

SU9 Manufacture of fine chemicals

SU23 Electricity, steam, gas water supply and sewage treatment

· **Product category**

PC2 Adsorbents

PC20 Processing aids such as pH-regulators, flocculants, precipitants, neutralization agents

PC21 Laboratory chemicals

PC29 Pharmaceuticals

PC37 Water treatment chemicals

· **Process category**

PROC3 Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition

PROC5 Mixing or blending in batch processes

PROC15 Use as laboratory reagent

· **Environmental release category**

ERC4 Use of non-reactive processing aid at industrial site (no inclusion into or onto article)

ERC8a Widespread use of non-reactive processing aid (no inclusion into or onto article, indoor)

ERC8b Widespread use of reactive processing aid (no inclusion into or onto article, indoor)

· **Article category** AC0 Other

· **Application of the substance / the mixture**

Industrial use

Laboratory chemicals

Commercial use

Reagent for analysis

· 1.3 Details of the supplier of the safety data sheet

· **Manufacturer/Supplier:**

Th. Geyer GmbH & Co. KG

Dornierstr. 4 – 6

D-71272 Renningen

Tel.: +49(0)7159-1637-0, Fax: +49 (0)7159/18417

www.thgeyer.de

sicherheitsdatenblaetter@thgeyer.de

· **Further information obtainable from:** Product management department

· 1.4 Emergency telephone number:

National Poisons Information Service

City Hospital

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Dudley Road
 Birmingham B18 7QH
 Tel.:Emergency: (00 44) 87 06 00 62 66
 Members of the public seeking specific information on poisons should contact:
 In England and Wales: NHS 111 - dial 111
 In Scotland: NHS 24 - dial 111

SECTION 2: Hazards identification

- **2.1 Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008**
 The substance is not classified, according to the GB CLP regulation.
- **2.2 Label elements**
- **Labelling according to Regulation (EC) No 1272/2008** Void
- **Hazard pictograms** Void
- **Signal word** Void
- **Hazard statements** Void
- **2.3 Other hazards**
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

SECTION 3: Composition/information on ingredients

- **3.1 Substances**
- **CAS No. Description**
 CAS: 7631-86-9 Kieselgel
- **Identification number(s)**
- **EC number:** 231-545-4

SECTION 4: First aid measures

- **4.1 Description of first aid measures**
- **General information:** First aider needs to protect himself.
- **After inhalation:**
 Supply fresh air.
 If symptoms occur or in case of doubt, seek medical advice.
- **After skin contact:** Rinse skin with water/shower.
- **After eye contact:** Rinse out opened eye for several minutes under running water.
- **After swallowing:**
 Rinse out mouth and then drink plenty of water.
 Consult a doctor if symptoms persist
- **Information for doctor:** Please observe safety data sheet/label.
- **4.2 Most important symptoms and effects, both acute and delayed**
 No further relevant information available.
- **4.3 Indication of any immediate medical attention and special treatment needed** Symptomatic treatment.

SECTION 5: Firefighting measures

- **5.1 Extinguishing media**
- **Suitable extinguishing agents:** Use fire extinguishing methods suitable to surrounding conditions.
- **For safety reasons unsuitable extinguishing agents:** Water with full jet.
- **5.2 Special hazards arising from the substance or mixture**
 Not combustible.

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Under certain fire conditions, traces of other toxic gases cannot be excluded.

5.3 Advice for firefighters**Protective equipment:** Do not inhale explosion gases or combustion gases.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Wear protective clothing.

Use respiratory protective device against the effects of fumes/dust/aerosol.

Ensure adequate ventilation.

Do not inhale dust.

Avoid contact with eyes and skin.

Avoid formation of dust.

6.2 Environmental precautions: No special measures required.**6.3 Methods and material for containment and cleaning up:** Pick up mechanically.**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 disposal information.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Open and handle receptacle with care.

Ensure good ventilation/exhaustion at the workplace.

Store in cool, dry place in tightly closed receptacles.

Apply the general protection and hygiene measures for the handling with chemicals.

Information about fire - and explosion protection:

Substance itself does not burn, tuning measures to environment

7.2 Conditions for safe storage, including any incompatibilities**Storage:****Requirements to be met by storerooms and receptacles:** Store only in the original receptacle.**Information about storage in one common storage facility:** Store away from other chemicals**Further information about storage conditions:**

Protect from humidity and water.

Protect from heat and direct sunlight.

Storage class: 13**7.3 Specific end use(s)** No further relevant information available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters**Ingredients with limit values that require monitoring at the workplace:** Not required.**Additional information:** The lists valid during the making were used as basis.**8.2 Exposure controls****Appropriate engineering controls** No further data; see section 7.**Individual protection measures, such as personal protective equipment****General protective and hygienic measures:**

The usual precautionary measures are to be adhered to when handling chemicals.

Respiratory protection:

Not necessary if room is well-ventilated.

If the general dust-limit es exceeded, breathing masks with fine-dust filters are necessary (EN 143), code colour white.

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· Hand protection

Protective gloves and protective skin cream



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· Material of gloves

Information on suitable glove materials is not available at present.

However, experience has shown that the glove materials polychloroprene, nitrile rubber, butyl rubber, fluororubber and polyvinyl chloride are suitable for protection against undissolved solids.

· Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· Eye/face protection

Safety glasses

· Body protection:

Protective work clothing (e. g. safety shoes EN ISO 20345, long-sleeved protective working garments).

SECTION 9: Physical and chemical properties

· 9.1 Information on basic physical and chemical properties**· General Information****· Physical state**

Solid

· Colour:

White

· Odour:

Odourless

· Melting point/freezing point:

1,713 °C

· Boiling point or initial boiling point and boiling range

2,230 °C

· Flammability

Product is not flammable.

· Lower and upper explosion limit**· Lower:**

Not determined.

· Upper:

Not determined.

· Flash point:

Not applicable.

· Decomposition temperature:

Not determined.

· pH

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· Viscosity:**· Kinematic viscosity**

Not applicable.

· Dynamic:

Not applicable.

· Solubility**· water:**

Insoluble.

· Partition coefficient n-octanol/water (log value)

Not determined.

· Vapour pressure:

Not applicable.

· Density and/or relative density**· Density at 20 °C:**2.2 g/cm³

Not determined.

· Relative density

Not determined.

· Vapour density

Not applicable.

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- **Particle characteristics**

See section 3.

- **9.2 Other information**

- **Appearance:**

- **Form:**

Powder

- **Important information on protection of health and environment, and on safety.**

- **Ignition temperature:**

Not determined.

- **Explosive properties:**

Product does not present an explosion hazard.

- **Molecular weight**

60.09 g/mol

- **Change in condition**

- **Evaporation rate**

Not applicable.

- **Information with regard to physical hazard classes**

- **Explosives**

Void

- **Flammable gases**

Void

- **Aerosols**

Void

- **Oxidising gases**

Void

- **Gases under pressure**

Void

- **Flammable liquids**

Void

- **Flammable solids**

Void

- **Self-reactive substances and mixtures**

Void

- **Pyrophoric liquids**

Void

- **Pyrophoric solids**

Void

- **Self-heating substances and mixtures**

Void

- **Substances and mixtures, which emit flammable gases in contact with water**

Void

- **Oxidising liquids**

Void

- **Oxidising solids**

Void

- **Organic peroxides**

Void

- **Corrosive to metals**

Void

- **Desensitised explosives**

Void

SECTION 10: Stability and reactivity

- **10.1 Reactivity** No further relevant information available.

- **10.2 Chemical stability** Stable with proper storage and handling.

- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.

- **10.3 Possibility of hazardous reactions** No dangerous reactions known.

- **10.4 Conditions to avoid** Protect from humidity.

- **10.5 Incompatible materials:** Avoid contact with other chemicals.

- **10.6 Hazardous decomposition products:** On fire: see chapter 5

SECTION 11: Toxicological information

- **11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008**

- **Acute toxicity** Based on available data, the classification criteria are not met.

- **LD/LC50 values relevant for classification:**

Oral	LD50	10,000 mg/kg (rat)
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- **Skin corrosion/irritation** Based on available data, the classification criteria are not met.

- **Serious eye damage/irritation** Based on available data, the classification criteria are not met.

- **Respiratory or skin sensitisation** Based on available data, the classification criteria are not met.

- **Germ cell mutagenicity** Based on available data, the classification criteria are not met.

- **Carcinogenicity** Based on available data, the classification criteria are not met.

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- **Reproductive toxicity** Based on available data, the classification criteria are not met.
- **STOT-single exposure** Based on available data, the classification criteria are not met.
- **STOT-repeated exposure** Based on available data, the classification criteria are not met.
- **Aspiration hazard** Based on available data, the classification criteria are not met.
- **11.2 Information on other hazards**
- **Endocrine disrupting properties** Substance is not listed.

SECTION 12: Ecological information

- **12.1 Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **12.2 Persistence and degradability** No further relevant information available.
- **12.3 Bioaccumulative potential** No further relevant information available.
- **12.4 Mobility in soil** No further relevant information available.
- **12.5 Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **12.6 Endocrine disrupting properties**
The product does not contain substances with endocrine disrupting properties.
- **12.7 Other adverse effects**
- **Additional ecological information:**
- **General notes:** In generally not hazardous for water.

SECTION 13: Disposal considerations

- **13.1 Waste treatment methods** Observe local (country-specific) regulations and laws
- **Recommendation**
Smaller quantities can be disposed of with household waste.
Chemicals must be disposed of in compliance with the respective national regulations.
- **Uncleaned packaging:**
- **Recommendation:**
Packaging may be reused or recycled after cleaning.
Non contaminated packagings may be treated like household garbage.

SECTION 14: Transport information

- | | |
|--|---------------|
| · 14.1 UN number or ID number | |
| · ADR, ADN, IMDG, IATA | not regulated |
| · 14.2 UN proper shipping name | |
| · ADR, ADN, IMDG, IATA | not regulated |
| · 14.3 Transport hazard class(es) | |
| · ADR | |
| · Class | - (-) |
| · Label | - |
| · ADN/R Class: | not regulated |
| · IMDG, IATA | |
| · Class | not regulated |
| · Label | - |
| · 14.4 Packing group | |
| · ADR, IMDG, IATA | not regulated |

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· 14.5 Environmental hazards:	Not applicable.
· 14.6 Special precautions for user	Not applicable.
· Hazard identification number (Kemler code):	-
· 14.7 Maritime transport in bulk according to IMO instruments	Not applicable.
· UN "Model Regulation":	not regulated

SECTION 15: Regulatory information

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Inventory of Hazardous Chemicals** Substance is not listed.
- **Directive 2012/18/EU**
- **Named dangerous substances - ANNEX I** Substance is not listed.
- **DIRECTIVE 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment – Annex II**
Substance is not listed.
- **REGULATION (EU) 2019/1148**
- **Annex I - RESTRICTED EXPLOSIVES PRECURSORS (Upper limit value for the purpose of licensing under Article 5(3))**
Substance is not listed.
- **Annex II - REPORTABLE EXPLOSIVES PRECURSORS** Substance is not listed.
- **Regulation (EC) No 273/2004 on drug precursors** Substance is not listed.
- **Regulation (EC) No 111/2005 laying down rules for the monitoring of trade between the Community and third countries in drug precursors**
Substance is not listed.
- **National regulations:**
- **Information about limitation of use:**
Employment restrictions concerning juveniles must be observed.
Employment restrictions concerning pregnant and lactating women must be observed.
- **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.
Application, use and handling of our products take place out of our control and are solely your responsibility.

- **Department issuing SDS:** Product management
- **Contact:** Product management
- **Version number of previous version:** 2
- **Abbreviations and acronyms:**
ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
GHS: Globally Harmonised System of Classification and Labelling of Chemicals
EINECS: European Inventory of Existing Commercial Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative
- *** Data compared to the previous version altered.**