

**SAFETY DATA SHEET**

Revision: 11. 09. 2023

Version number: 1.1

**1. Identification of the substance/mixture and of the company/undertaking.****1.1 Product identifier: SILICAGEL, ORANGE**

The product is a mixture.

*Substance a)* silicon dioxide (REACH),  
silicon dioxide (IUPAC).

*Index number:*

-

*EC number:* 231-545-4*REACH registration number:* 01-2119379499-16-XXXX*CAS number:* 7631-86-9

*Substance b)* Methyl violet  
[4-[(4-dimethylaminophenyl)-[4-(methylamino)phenyl]methylidene]cyclohexa-2,5-dien-1-ylidene]-dimethylazanium chloride (IUPAC)

*Index number:*

-

*EC number:* 616-846-4*REACH registration number:* -*CAS number:* 8004-87-3**1.2: Relevant identified uses of the substance or mixture and uses advised against:****1.2.1 Identified uses:**

Desiccant.

**1.2.2 Uses advised against:** No data available**1.3 Details of the supplier of the safety data sheet:**

Isolatech Sergej Vogt  
Hans-Böckler-Str. 38A, 40764 Langenfeld  
Tel.: +49 (0)2173 8930621

*E-mail address for a competent person responsible for the safety data sheet:* [info@isolatech.de](mailto:info@isolatech.de)**1.4 Emergency telephone number:**

112

## 2. Hazards identification.

2.1 *Classification of the substance or mixture:* not classified.

2.2 *Label elements:*

**Hazard pictogram(s):** not applicable.

**Signal word:** not applicable.

Hazard statement(s): not applicable.

Precautionary Statement(s): not applicable.

2.3 *Other hazards:*

Incompatible materials: no data available.

PBT/vPvB: this mixture contains no components considered to be either persistent, bioaccumulative and toxic, or very persistent and very bioaccumulative (vPvB) at or above 0.1%.

Endocrine disrupting properties: the product does not contain substances above the legally permissible limits contained in the list drawn up in accordance with Art. 59 sec. 1 of Regulation (EC) No. 1907/2006 for having endocrine disrupting properties or which would be identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605.

## 3. Composition/information on ingredients.

The product is mixture.

3.1 *Substances:* not applicable.

3.2 *Mixtures:* Substance a): silicon dioxide

Mass fraction: min. 98,0 %

CAS number: 7631-86-9

EC number: 231-545-4

Index number: -

REACH registration number: 01-2119379499-16-XXXX

Chemical formula: O<sub>2</sub>Si

Molar mass: 60.08 g/mol

Classification of the substance: Not classified

Acute toxicity (ATE) - oral: -

Acute toxicity (ATE) - inhalation: -

Acute toxicity (ATE) - dermal: -

M-factor (acute hazard): -

M-factor (chronic risk): -

Substance b): methyl violet

Mass fraction: max. 0,2 %

CAS number: 8004-87-3

EC number: 616-846-4

Index number: -

Chemical formula: -

Molar mass: -

Classification of the substance:

Acute Tox. 4

H302: Harmful if swallowed.

Eye Dam. 1

H318: Causes serious eye damage.

Aquatic Chronic 1

H410: Very toxic to aquatic life with long lasting effects.

Acute toxicity (ATE) - oral:-

Acute toxicity (ATE) - inhalation: -

Acute toxicity (ATE) - dermal: -

M-factor (acute hazard): -

M-factor (chronic risk): -

#### **4. First aid measures.**

##### *4.1 Description of first aid measures:*

General: check vital functions. Depending on the condition of the victim consult: doctor/hospital.

a) Inhalation: move affected to fresh air.

b) Contact with eyes: rinse immediately with plenty of water (15 minutes). In case of irritation consult an ophthalmologist.

c) Contact with skin: immediately remove contaminated clothing; wash affected skin thoroughly with water. Soap may be used.

d) Ingestion: rinse mouth with water. Immediately give plenty of water to drink. The injured person is conscious: induce vomiting. Ingestion of large amounts: seek immediate medical attention.

##### *4.2 Most important symptoms and effects, both acute and delayed:*

Eyes: may cause mechanical irritation. Symptoms: redness and pain.

Skin: harmful effects not expected.

Inhalation: may cause mechanical irritation. Excessive or prolonged inhalation of dust can cause lung disease.

Ingestion: harmful effects not expected.

4.3 Indication of any immediate medical attention and special treatment needed: symptomatic treatment is recommended.

#### **5. Firefighting measures.**

##### *5.1 Extinguishing media:*

Suitable extinguishing media: according to materials stored in the immediate vicinity.

Unsuitable extinguishing media: water jet.

##### *5.2 Special hazards arising from the substance or mixture:*

do not allow run-off from firefighting to enter drains or water courses.

Non-flammable substance..

##### *5.3 Advice for firefighters:*

Special protective equipment for firefighters: in the event of fire, wear self-contained breathing apparatus.

Further information: collect contaminated fire extinguishing water separately. It cannot be discharged into the sewage system.

Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

#### **6. Accidental release measures.**

##### *6.1 Personal precautions, protective equipment and emergency procedures:*

###### *6.1.1 For non-emergency personnel:*

Protective equipment: no precautions other than clean body-covering clothing should be needed.

Protective procedures: secure the area and remove people from the hazard area.

Isolate the site of the release as soon as possible by trained personnel.

###### *6.1.2 For emergency responders:*

use protective gloves.

Wear appropriate clothing to prevent any possibility of skin contact.  
Wear dust-resistant safety goggles where there is danger of eye contact..  
Use suitable respiratory equipment.

**6.2 Environmental precautions:** Secure against entering the municipal water and sewage system and water courses.

**6.3 Methods and material for containment and cleaning up:**

remove unprotected persons from the affected area. Protect gullies. Avoid direct contact with the product. Avoid breathing dust. If possible, prevent the further discharge of substances Place damaged container a substitute container. Collect dry product. Rinse contaminated surface with water. Hand over to authorized disposal.

**6.4 Reference to other sections:** for personal protection, see section 8.

In the case of waste management, see section 13

## **7. Handling and storage.**

**7.1 Precautions for safe handling:**

**7.1.1. Recommendations:**

- a) avoid contact with the eyes. Avoid the formation of inhalable dust. Do not inhale dust. Provide local exhaust ventilation.
- b) reduce the release of the substance or mixture to the environment, for example by preventing releases or from entering drains.

**7.1.2. Recommendations for general occupational hygiene:**

- a) do not eat, drink or smoke in the workplace;
- b) wash hands after use;
- c) remove contaminated clothing and protective equipment before entering dining areas.

**7.2 Conditions for safe storage, including any incompatibilities:**

protect against unauthorized access.

Store in a dry place.

Store at room temperature in the original packaging.

Keep container tightly closed.

KEEP AWAY FROM MOISTURE.

Storage temperature: Undetermined.

Incompatible materials: No data available.

**7.3 Specific end use(s):** Desiccant.

## **8. Exposure controls/personal protection.**

**8.1 Control parameters:** No data available.

Poland: NDS: not specified

NDSCh: not specified

NDSP: not specified

Rozporządzenie Ministra Rodziny, Pracy i Polityki Społecznej z dnia 12 czerwca 2018 r. w sprawie najwyższych dopuszczalnych stężeń i natężeń czynników szkodliwych dla zdrowia w środowisku pracy.

EU: Long-term Exposure Limit (LTEL) Values: not specified

Short-term Exposure Limit (STEL) Values: not specified

Commission Directive 2006/15/EC of 7 February 2006 establishing a second list of indicative occupational exposure limit values in implementation of Council Directive 98/24/EC and amending Directives 91/322/EEC and 2000/39/EC (Text with EEA relevance).

DNEL values:

DNELs (employees):

No data available

DNEL (general population):

No data available

PNEC values:  
No data available

## 8.2 Exposure controls:

### 8.2.1 Appropriate engineering controls:

ventilate as needed to control airborne dust.

Provide eyewash stations and showers near the workplace.

### 8.2.2. Individual protection measures, such as personal protective equipment

a) Eyes protection: wearing goggles is not required in normal, industrial exposure conditions, however, it may be justified when the environment is excessively dusty.

b) Hands and skin protection:

hands protection: chemical-resistant gloves not required.

other: no precautions other than clean body-covering clothing should be needed.

c) Respiratory protection: wearing of respiratory protection is not required in normal, industrial exposure conditions, however, it may be justified when the environment is excessively dusty.

Dust production: dust mask with filter type P2, FFP2.

d) Thermal hazards: no data available.

### 8.2.3. Environmental exposure controls: avoid release to the environment.

## 9. Physical and chemical properties.

### 9.1 Information on basic physical and chemical properties:

a) Physical state: solid.

b) Colour: orange (turns dark green on contact with moisture).

c) Odour: odourless.

d) Melting point/freezing point: not applicable (decomposition).

e) Boiling point or initial boiling point and boiling range: not applicable (decomposition).

f) Flammability: not flammable.

g) Lower and upper explosion limit:  
Upper: do not apply to solids.  
Lower: do not apply to solids.

h) Flash point: do not apply to solids.

i) Auto-ignition temperature: only applies to gases and liquids.

j) Decomposition temperature: no data available.

k) pH: 2.0 - 3.5 (100 g/l aqueous suspension).

l) Kinematic viscosity: only applies to liquids.

m) Solubility: water: 120 mg/l (37 °C).

n) Partition coefficient n-octanol/water (log value): Log Kow (Log Pow): not applicable (mixture).

o) Vapour pressure: no data available.

p) Density and/or relative density: bulk density: 700.0 - 750.0 kg/m<sup>3</sup>.

q) Relative vapour density: only applies to gases and liquids.

r) Particle characteristics: 2,0 – 7,0 mm granules.

### 9.2 Other information:

#### 9.2.1 Information with regard to physical hazard classes: -

#### 9.2.2 Other safety characteristics:

a) Explosive properties: no explosive properties.

b) Oxidizing properties: no oxidizing properties.

## 10. Stability and reactivity.

10.1 Reactivity: no data available.

10.2 Chemical stability: stable under recommended storage and handling conditions.

10.3 Possibility of hazardous reactions: no data available.

10.4 Conditions to avoid: moisture (during storage).

10.5 Incompatible materials: no data available.

10.6 Hazardous decomposition products: no data available.

## 11. Toxicological information.

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

Product:

a) Acute toxicity:

Oral	based on available data, the classification criteria are not met. LD50, (rat) $\geq$ 5000 mg/kg body weight.
Inhalation.	based on available data, the classification criteria are not met. LC0, (rat) $\geq$ 0,69 mg/l/4 h.
Dermal	based on available data, the classification criteria are not met. LD50, (rabbit) $\geq$ 5000 mg/kg body weight.

b) Skin corrosion/irritation:

c) Serious eye damage/irritation: based on available data, the classification criteria are not met.

d) Respiratory or skin sensitisation:

Respiratory sensitization: based on available data, the classification criteria are not met.

Skin sensitization: based on available data, the classification criteria are not met.

e) Germ cell mutagenicity: based on available data, the classification criteria are not met.

f) Carcinogenicity: based on available data, the classification criteria are not met.

g) Reproductive toxicity: based on available data, the classification criteria are not met.

h) STOT-single exposure: based on available data, the classification criteria are not met.

i) STOT-repeated exposure: based on available data, the classification criteria are not met.

j) Aspiration hazard: data lacking.

### 11.2 Information on other hazards

11.2.1 Endocrine disrupting properties: no adverse health effects caused by endocrine disrupting properties.

### 11.2.2 Other information:

#### Most important symptoms and effects, both acute and delayed:

Eyes: may cause mechanical irritation. Symptoms: redness and pain.

Skin: harmful effects not expected.

Inhalation: may cause mechanical irritation. Excessive or prolonged inhalation of dust can cause lung disease.

Ingestion: harmful effects not expected.

## 12. Ecological information.

### 12.1 Toxicity:

Product:

Hazardous to the aquatic environment (acute / short-term): based on available data, the classification criteria are not met.

Hazardous to the aquatic environment (long-term): based on available data, the classification criteria are not met.

Hazardous to the ozone layer: based on available data, the classification criteria are not met.

Substance a) silicon dioxide

CAS number: 7631-86-9

Fish: LC0, Zebra danio (*Danio rerio*): >10000 mg/l, 96 h

Aquatic invertebrates: EC50, Daphnia > 10000 mg/l, 24 h

Algae / aquatic plants: NOEL, Algae > 10000 mg/l, 72 h

Microorganisms: No data available.

Substance b): methyl violet

CAS number: 8004-87-3

Hazardous to the aquatic environment — Chronic Hazard, Category 1: H410: Very toxic to aquatic life with long lasting effects.

Fish: no data available.

Aquatic invertebrates: no data available.

Algae / aquatic plants: no data available.

Microorganisms: no data available.

**12.2 Persistence and degradability:**

Substance a) silicon dioxide

CAS number: 7631-86-9

not applicable – inorganic.

Substance b): methyl violet

CAS number: 8004-87-3

not readily biodegradable.

**12.3 Bioaccumulative potential:**

Substance a) silicon dioxide

CAS number: 7631-86-9

not applicable – inorganic.

Substance b): methyl violet

CAS number: 8004-87-3

no data available.

**12.4 Mobility in soil:**

Substance a) silicon dioxide

CAS number: 7631-86-9

insoluble and thus has poor mobility in soil.

Substance b): methyl violet

CAS number: 8004-87-3

no data available.

**12.5 Results of PBT and vPvB assessment:** This mixture contains no components considered to be either persistent, bioaccumulative and toxic, or very persistent and very bioaccumulative (vPvB) at or above 0.1%.

**12.6 Endocrine disrupting properties:** no adverse environmental effects caused by endocrine disrupting properties.

**12.7 Other adverse effects:** no data available.

## **13. Disposal considerations.**

**13.1 Waste treatment methods:**

dispose of contents/container in accordance with licensed collector's sorting instructions.

Remove waste in accordance with local and/or national regulations. Hazardous waste shall not be mixed together with other waste. Different types of hazardous waste shall not be mixed together if this may entail a risk of pollution or create problems for the further management of the waste. Hazardous waste shall be managed responsibly. All entities that store, transport or handle hazardous waste shall take the necessary measures to prevent risks of pollution or damage to people or animals. Incinerate under surveillance with energy recovery. Do not discharge into drains or the environment. Packaging containing remains are dangerous.

Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on waste and repealing certain Directives.

## **14. Transport information.**

**14.1. UN number or ID number:** Not applicable.

**14.2. UN proper shipping name:** -

**14.3. Transport hazard class(es):** -

**14.4. Packing group:** -

**14.5. Environmental hazards:** -

**14.6. Special precautions for user:**

Classification code: -

Special provisions: -

Limited quantities: -  
Excepted quantities: -  
Packing instructions: -  
Mixed packing provisions: -  
Portable tank and bulk container instructions: -  
Portable tank and bulk container special provisions: -  
Tank code: -  
Tank special provisions: -  
Vehicle for tank carriage: -  
Transport category: -  
Special provisions for carriage - Packages: -  
Special provisions for carriage - Loading, unloading and handling: -  
Hazard identification number (Kemler No.): -  
*14.7. Maritime transport in bulk according to IMO instruments: -*

## **15. Regulatory information.**

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

*REACH:*

a) *Annex XIV - List of substances subject to authorization*

*Substances of very high concern:* None of the components are in the list.

b) *Annex XVII Restrictions on the manufacture, placing on the market and use of certain dangerous substances, preparations and articles:* not applicable.

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), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC

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, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006

REGULATION (EC) No 767/2009 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 13 July 2009 on the placing on the market and use of feed, amending European Parliament and Council Regulation (EC) No 1831/2003 and repealing Council Directive 79/373/EEC, Commission Directive 80/511/EEC, Council Directives 82/471/EEC, 83/228/EEC, 93/74/EEC, 93/113/EC and 96/25/EC and Commission Decision 2004/217/EC

Regulation (EC) No 2003/2003 of the European Parliament and of the Council of 13 October 2003 relating to fertilisers.

Regulation (EC) No 178/2002 of the European Parliament and of the Council of 28 January 2002 laying down the general principles and requirements of food law, establishing the European Food Safety Authority and laying down procedures in matters of food safety.

*15.2 Chemical safety assessment:* not required.

## **16. Other information.**

a) *Indication of changes:* review

b) *Key abbreviations and acronyms used in the safety data sheet:*

ACGIH: American Conference of Governmental Industrial Hygienist

ADN: Accord européen relative au transport international des marchandises Dangereuses

par voies de Naviagation intérieures.

ADR: the european Agreement concerning the international carriage og Dangerous goods by Road.

B: Bioaccumulative

CSR: Chemical Safety Report

CSA: Chemical Safety Assessment

DNEL: Derived No Effect Level

IATA: International Air Transport Association

IBC: International Bulk Chemical code

ICAO: International Civil Aviation Organization

IMGD: International Maritime Dangerous Goods code

LC50: Lethal Concentration 50

LD50: Lethal Dose 50

LLNA: Local LymphNode Assay

MARPOL: international convention for the prevention of MArine POLLution

P: Persistent

PBT: Persistent, Bioaccumulative and Toxic

PNEC: Predicted No Effect Concentration

RID: Regulations concerning the International carriage of Dangerous goods by rail

SDS: Safety Data Sheet

STEL: Short Term Exposure Limit

TLV: Threshold Limit Value

TWA: Time Weighted Average

vPvB: very Persistent very Bioaccumulative

*c) Key literature references and sources for data:*

Suppliers safety data sheet.

<https://echa.europa.eu/pl/substance-information/-/substanceinfo/100.028.678>

<https://echa.europa.eu/pl/substance-information/-/substanceinfo/100.111.727>

*c) Indication of which of the methods of evaluating information referred to in Article 9 of Regulation (EC) No 1272/2008 was used for the purpose of mixture classification: Not applicable*

*d) List of relevant hazard statements and/or precautionary statements:* Written out in full under section 2.

*e) Advice on any training appropriate for workers to ensure protection of human health and the environment:*

It is recommended to train workers to ensure the protection of human health and the environment. It is necessary for the people working with the product to read and understand this SDS. We recommend storing the SDS in a place with easy access to it for everyone who works with the product, and (if needed) for emergency services.

*Disclaimer:* The information contained in the SDS is to describe the product only from the point of safety requirements. Users of the product are responsible for creating the conditions for the safe use of the product and take responsibility for consequences resulting from improper use of this product. It is recommended to conduct training for health and safety, to ensure protection of human health and the environment.