

# SAFETY DATA SHEET

(REACH regulation (EC) n° 1907/2006 - n° 2015/830)

## SECTION 1 : IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

### 1.1. Product identifier

Product name : FEUTRES DE SILICE QUARTZEL® PCO

Product code : SGQ.FL.017.

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

Use for photocatalysis: water purification, air purification.

### 1.3. Details of the supplier of the safety data sheet

Registered company name : SAINT-GOBAIN QUARTZ SAS.

Address : Usine de Nemours, 108 avenue Carnot.77140.Saint-Pierre-Lès-Nemours.France.

Telephone : +33 (0)1 64 45 45 00. Fax : +33 (0)1 64 28 29 78.

Email : dl-sgquartz-fds@saint-gobain.com

<http://quartz.saint-gobain.com>

### 1.4. Emergency telephone number : +33 (0)1 45 42 59 59.

Association/Organisation : INRS / ORFILA <http://www.centres-antipoison.net>.

## SECTION 2 : HAZARDS IDENTIFICATION

### 2.1. Classification of the substance or mixture

#### In compliance with EC regulation No. 1272/2008 and its amendments.

This mixture does not present a physical hazard. Refer to the recommendations regarding the other products present on the site.

This mixture does not present a health hazard with the exception of possible occupational exposure thresholds (see paragraphs 3 and 8).

This mixture does not present an environmental hazard. No known or foreseeable environmental damage under standard conditions of use.

### 2.2. Label elements

#### In compliance with EC regulation No. 1272/2008 and its amendments.

No labelling requirements for this mixture.

### 2.3. Other hazards

The mixture does not contain substances classified as 'Substances of Very High Concern' (SVHC)  $\geq$  0.1% published by the European Chemicals Agency (ECHA) under article 57 of REACH: <http://echa.europa.eu/fr/candidate-list-table>

The mixture satisfies neither the PBT nor the vPvB criteria for mixtures in accordance with annexe XIII of the REACH regulations EC 1907/2006. Suppliers data (non-regulatory):

Contact with the fibres can cause temporary physical phenomena:

- skin irritation and drying,
- ocular and upper respiratory tract irritation.

Cutting, shaping, abusive handling, abusive transport and storage conditions for the product can create dust.

## SECTION 3 : COMPOSITION/INFORMATION ON INGREDIENTS

### 3.2. Mixtures

#### Composition :

Identification	(EC) 1272/2008	Note	%
CAS: 60676-86-0		[1]	50 $\leq$ x % < 100
SILICA DIOXYDE CAS: 13463-67-7 EC: 236-675-5 REACH: 01-2119489379-17		[1]	10 $\leq$ x % < 25
TITANIUM DIOXIDE			

#### Information on ingredients :

[1] Substance for which maximum workplace exposure limits are available.

#### Other data :

Article made by assembling pure molten (amorphous) silicate filaments with diameters between 7 and 14  $\mu$ m, coated with a layer of titanium dioxide and silicon oxide for photocatalytic use.

## SECTION 4 : FIRST AID MEASURES

As a general rule, in case of doubt or if symptoms persist, always call a doctor.  
NEVER induce swallowing by an unconscious person.

### 4.1. Description of first aid measures

#### In the event of exposure by inhalation :

If a large quantity of dust is inhaled, move the patient into the fresh air and keep him/her warm and still.

#### In the event of splashes or contact with eyes :

Wash thoroughly with fresh, clean water for 15 minutes holding the eyelids open.

If there is any redness, pain or visual impairment, consult an ophthalmologist.

#### In the event of splashes or contact with skin :

Watch out for any remaining product between skin and clothing, watches, shoes, etc.

Wash the skin thoroughly with soap and water or a recognised cleaner.

#### In the event of swallowing :

Seek medical attention, showing the label.

### 4.2. Most important symptoms and effects, both acute and delayed

No data available.

### 4.3. Indication of any immediate medical attention and special treatment needed

No data available.

## SECTION 5 : FIREFIGHTING MEASURES

Non-flammable.

Cool packages near flames to avoid them burning.

### 5.1. Extinguishing media

No data available.

### 5.2. Special hazards arising from the substance or mixture

A fire will often produce a thick black smoke. Exposure to decomposition products may be hazardous to health.

Do not breathe in smoke.

### 5.3. Advice for firefighters

No data available.

## SECTION 6 : ACCIDENTAL RELEASE MEASURES

### 6.1. Personal precautions, protective equipment and emergency procedures

Consult the safety measures listed under headings 7 and 8.

#### For first aid worker

First aid workers will be equipped with suitable personal protective equipment (See section 8).

### 6.2. Environmental precautions

Prevent any material from entering drains or waterways.

### 6.3. Methods and material for containment and cleaning up

Retrieve the product by mechanical means (sweeping/vacuuming).

Moisten and recover all waste in containers dedicated to waste silica.

### 6.4. Reference to other sections

No data available.

## SECTION 7 : HANDLING AND STORAGE

Requirements relating to storage premises apply to all facilities where the mixture is handled.

### 7.1. Precautions for safe handling

Always wash hands after handling.

#### Fire prevention :

Prevent access by unauthorised personnel.

#### Recommended equipment and procedures :

For personal protection, see section 8.

Observe precautions stated on label and also industrial safety regulations.

#### Prohibited equipment and procedures :

No smoking, eating or drinking in areas where the mixture is used.

### 7.2. Conditions for safe storage, including any incompatibilities

Keep at temperature not exceeding 25 ° C and RH <= 65% in a ventilated and protected from light.

### Packaging

Always keep in packaging made of an identical material to the original.

### 7.3. Specific end use(s)

No data available.

## SECTION 8 : EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1. Control parameters

#### Occupational exposure limits :

- ACGIH TLV (American Conference of Governmental Industrial Hygienists, Threshold Limit Values, 2010) :

CAS	TWA :	STEL :	Ceiling :	Definition :	Criteria :
13463-67-7	10 mg/m3	-	-	-	-

- Germany - AGW (BAuA - TRGS 900, 21/06/2010) :

CAS	VME :	VME :	Excess	Notes
60676-86-0	-	0,3 mg/m3 A	-	DFG, Y

- Belgium (Order of 19/05/2009, 2010) :

CAS	TWA :	STEL :	Ceiling :	Definition :	Criteria :
60676-86-0	0.1 mg/m3	-	-	-	-
13463-67-7	10 mg/m3	-	-	-	-

- France (INRS - ED984 :2012) :

CAS	VME-ppm :	VME-mg/m3 :	VLE-ppm :	VLE-mg/m3 :	Notes :	TMP No :
13463-67-7	-	10	-	-	-	-

- Switzerland (SUVA 2009) :

CAS	VME-mg/m3 :	VME-ppm :	VLE-mg/m3 :	VLE-ppm :	Temps :	RSB :
60676-86-0	0,3 a	-	-	-	-	-
13463-67-7	3a	-	-	-	-	-

- UK / WEL (Workplace exposure limits, EH40/2005, 2007) :

CAS	TWA :	STEL :	Ceiling :	Definition :	Criteria :
60676-86-0	0.08 mg/m3	-	-	-	R
13463-67-7	10 mg/m3	-	-	-	TI

#### Derived no effect level (DNEL) or derived minimum effect level (DMEL):

TITANIUM DIOXIDE (CAS: 13463-67-7)

#### Final use:

Exposure method:

Potential health effects:

DNEL :

#### Workers.

Ingestion.

Long term systemic effects.

700 mg/kg body weight/day

Exposure method:

Potential health effects:

DNEL :

Inhalation.

Long term local effects.

10 mg of substance/m3

#### Predicted no effect concentration (PNEC):

TITANIUM DIOXIDE (CAS: 13463-67-7)

Environmental compartment:

PNEC :

Soil.

100 mg/kg

Environmental compartment:

PNEC :

Fresh water.

0.127 mg/l

Environmental compartment:

PNEC :

Sea water.

1 mg/l

Environmental compartment:

PNEC :

Intermittent waste water.

0.61 mg/l

Environmental compartment:

PNEC :

Fresh water sediment.

1000 mg/kg

Environmental compartment:

PNEC :

Marine sediment.

100

Environmental compartment: Waste water treatment plant.  
PNEC : 100 mg/l

## 8.2. Exposure controls

### Suitable technical inspections

Ensure adequate ventilation, if possible with extractor fans at work posts and appropriate general extraction.  
If the ventilation is insufficient to maintain the concentration of dust below the exposure limits, wear breathing apparatus.  
Avoid dust production by broken fibres.

### Personal protection measures, such as personal protective equipment

Pictogram(s) indicating the obligation of wearing personal protective equipment (PPE) :



Use personal protective equipment that is clean and has been properly maintained.  
Store personal protective equipment in a clean place, away from the work area.  
Never eat, drink or smoke during use. Remove and wash contaminated clothing before re-using. Ensure that there is adequate ventilation, especially in confined areas.

#### - Eye / face protection

Avoid contact with eyes.  
Before handling powders or dust emission, wear mask goggles in accordance with standard EN166.

#### - Hand protection

Wear suitable protective gloves in the event of prolonged or repeated skin contact.  
Use gloves to prevent cuts when handling units.

#### - Body protection

Work clothing worn by personnel shall be laundered regularly.  
After contact with the product, all parts of the body that have been soiled must be washed.

#### - Respiratory protection

Avoid breathing dust.  
Type of FFP mask :  
Wear a disposable half-mask dust filter in accordance with standard EN149.  
Particle filter according to standard EN143 :  
- P3 (White)

## SECTION 9 : PHYSICAL AND CHEMICAL PROPERTIES

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

#### General information :

Physical state :	Solid.
-	Felt thickness of 10 to 30 mm.
Colour:	White.
Odour:	Odourless.

#### Important health, safety and environmental information

pH :	Not relevant.
Flash point interval :	Not relevant.
Vapour pressure (50°C) :	Not relevant.
Density :	> 1
Water solubility :	Insoluble.

### 9.2. Other information

Sublimation temperature:	> 1660°C.
Density:	2.2 g/cm <sup>3</sup> (SiO <sub>2</sub> ).

## SECTION 10 : STABILITY AND REACTIVITY

### 10.1. Reactivity

No data available.

### 10.2. Chemical stability

This mixture is stable under the recommended handling and storage conditions in section 7.

### 10.3. Possibility of hazardous reactions

No data available.

#### 10.4. Conditions to avoid

Avoid :

- formation of dusts

#### 10.5. Incompatible materials

Keep away from :

- alkalis
- hydrofluoric acid

Violent reaction in contact with hydrofluoric acid, can give products of decomposition under the effect of temperature.

Amorphous silicate is transformed into crystalline silicate in the presence of alkali at about 800°C.

#### 10.6. Hazardous decomposition products

Prolonged exposure to >1300°C causes the quartz to be transformed into cristobalite.

## SECTION 11 : TOXICOLOGICAL INFORMATION

### 11.1. Information on toxicological effects

Handling silicate filaments can cause temporary irritation to skin and the upper respiratory tract.

#### 11.1.1. Substances

##### Acute toxicity :

TITANIUM DIOXIDE (CAS: 13463-67-7)

Oral route :

LD50 > 5000 mg/kg

Species : Rat

Inhalation route (n/a) :

LC50 = 3.43 mg/l

Species : Rat

#### 11.1.2. Mixture

No toxicological data available for the mixture.

## SECTION 12 : ECOLOGICAL INFORMATION

### 12.1. Toxicity

#### 12.1.2. Mixtures

No aquatic toxicity data available for the mixture.

### 12.2. Persistence and degradability

Not biodegradable.

### 12.3. Bioaccumulative potential

No data available.

### 12.4. Mobility in soil

No data available.

### 12.5. Results of PBT and vPvB assessment

No data available.

### 12.6. Other adverse effects

No data available.

#### German regulations concerning the classification of hazards for water (WGK) :

WGK 2 (VwVwS vom 27/07/2005, KBws) : Hazardous for water.

## SECTION 13 : DISPOSAL CONSIDERATIONS

Proper waste management of the mixture and/or its container must be determined in accordance with Directive 2008/98/EC.

### 13.1. Waste treatment methods

Do not pour into drains or waterways.

#### Waste :

Waste management is carried out without endangering human health, without harming the environment and, in particular without risk to water, air, soil, plants or animals.

Recycle or dispose of waste in compliance with current legislation, preferably via a certified collector or company.

Do not contaminate the ground or water with waste, do not dispose of waste into the environment.

#### Soiled packaging :

Empty container completely. Keep label(s) on container.

Give to a certified disposal contractor.

## SECTION 14 : TRANSPORT INFORMATION

Exempt from transport classification and labelling.

**14.1. UN number**

-

**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**

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## SECTION 15 : REGULATORY INFORMATION

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

**- Classification and labelling information included in section 2:**

The following regulations have been used:

- EU Regulation No. 1272/2008 amended by EU Regulation No. 487/2013.
- EU Regulation No. 1272/2008 amended by EU Regulation No. 758/2013.
- EU Regulation No. 1272/2008 amended by EU Regulation No. 944/2013.
- EU Regulation No. 1272/2008 amended by EU Regulation No. 605/2014.
- EU Regulation No. 1272/2008 amended by EU Regulation No. 1297/2014.

**- Container information:**

No data available.

**- Particular provisions :**

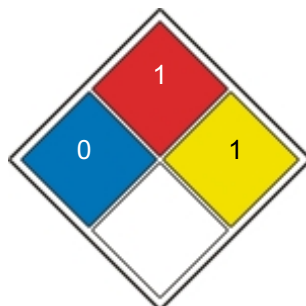
No data available.

**- German regulations concerning the classification of hazards for water (WGK) :**

WGK 2 (VwVwS vom 27/07/2005, KBws) : Hazardous for water.

**- Standardised American system for the identification of hazards presented by the product in view of emergency procedures (NFPA 704) :**

NFPA 704, Labelling: Health=0 Inflammability=1 Instability/Reactivity=1 Specific Risk=none



**- Swiss ordinance on the incentive tax on volatile organic compounds :**

67-56-1

méthanol (alcool méthylique)

**15.2. Chemical safety assessment**

No data available.

## SECTION 16 : OTHER INFORMATION

Since the user's working conditions are not known by us, the information supplied on this safety data sheet is based on our current level of knowledge and on national and community regulations.

The mixture must not be used for other uses than those specified in section 1 without having first obtained written handling instructions.

It is at all times the responsibility of the user to take all necessary measures to comply with legal requirements and local regulations.

The information in this safety data sheet must be regarded as a description of the safety requirements relating to the mixture and not as a guarantee of the properties thereof.

As we do not know all the user's working conditions, the data contained in this safety data sheet are based on our knowledge and national and European regulations.

**Abbreviations :**

DNEL : Derived No-Effect Level

PNEC : Predicted No-Effect Concentration

ADR : European agreement concerning the international carriage of dangerous goods by Road.

IMDG : International Maritime Dangerous Goods.

IATA : International Air Transport Association.

ICAO : International Civil Aviation Organisation

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

WGK : Wassergefahrdungskategorie (Water Hazard Class).

PBT: Persistent, bioaccumulable and toxic.

vPvB : Very persistent, very bioaccumulable.

SVHC : Substances of very high concern.