

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

1.1. Product identifier

Product form : Substance
Trade name/designation : SILfiller

IUPAC name : Amorphous silica

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

1.2.1. Relevant identified uses

Main use category : Industrial use
Use of the substance/mixture : thermal insulation

1.2.2. Uses advised against

No data available

1.3. Details of the supplier of the safety data sheet

Active Aerogels, Lda. Rua Pedro Nunes 3030-199 T +351 239700333 info@activeaerogels.com

1.4. Emergency telephone number

Country	Official advisory body	Address	Emergency number
Ireland	National Poisons Information Centre Beaumont Hospital	Beaumont Hospital Beaumont Road 9 Dublin	+353 1 809 21 66 (public, 8am - 10pm, 7/7) +353 01 809 2566 (Professionals, 24/7)
United Kingdom	National Poisons Information Service (Newcastle Centre) Regional Drugs and Therapeutics Centre, Wolfson Unit	Claremont Place Newcastle-upon-Tyne NE1 4LP Newcastle	0844 892 0111 (UK only, 24/7, healthcare professionals only)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Not classified

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Not applicable.

Other hazards

2.3. Other hazards

Adverse physicochemical, human health

: Dust formation. Risk of dust explosion.

and environmental effects

: The study does not need to be conducted because the substance is inorganic.

SECTION 3: Composition/information on ingredients

3.1. Substances

Comments : Amorphous silica (respirable dust <1%)

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Substance name : SILfiller

Substance name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Hydrofobic Silicon Dioxide, Amorphous	(CAS-No.) 67762-90-7 (EC-No.) - (EC Index) -	100	Not classified

Full text of H-statements: see section 16

3.2. Mixtures

Not applicable

SECTION 4: First aid measures

4.1. Description of first aid measures

Additional advice : First aider: Pay attention to self-protection. Concerning personal protective

equipment to use, see section 8. Never give anything by mouth to an unconscious person or a person with cramps. In case of doubt or persistent symptoms, consult always a physician. Show this safety data sheet to the doctor in attendance. Treat

symptomatically.

Inhalation : Remove person to fresh air and keep comfortable for breathing. In case of doubt or

persistent symptoms, consult always a physician.

Skin contact : Take off contaminated clothing. Gently wash with plenty of soap and water. In case

of doubt or persistent symptoms, consult always a physician.

Eyes contact : Rinse immediately carefully and thoroughly with eye-bath or water. In case of doubt

or persistent symptoms, consult always a physician.

Ingestion : Rinse mouth thoroughly with water. Get medical advice/attention.

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

Inhalation : The following symptoms may occur: Inhalation of dust may cause irritation of the

respiratory system.

Skin contact : The following symptoms may occur: Contact with dust may cause mechanical

irritation or drying of the skin.

Eyes contact : The following symptoms may occur: Dust may cause painful eye irritation and

tearing.

Ingestion : The following symptoms may occur: May cause gastrointestinal irritation, nausea,

vomiting and diarrhoea.

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

No data available

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : carbon dioxide (CO2), powder, alcohol-resistant foam, water spray.

Unsuitable extinguishing media : Strong water jet.

5.2. Special hazards arising from the substance or mixture

Specific hazards : Not flammable. Risk of dust explosion.

5.3. Advice for firefighters

Firefighting instructions : Evacuate area. Use water spray or fog for cooling exposed containers. Contain the

extinguishing fluids by bunding. Prevent fire fighting water from entering the environment. Avoid dust formation. Knock down/dilute dust cloud with water spray.

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained

breathing apparatus.

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Other information

: Do not allow run-off from fire-fighting to enter drains or water courses. Dispose of waste in accordance with environmental legislation.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

For non-emergency personnel

: Evacuate unnecessary personnel. Keep upwind. Provide adequate ventilation. Wear recommended personal protective equipment. Concerning personal protective equipment to use, see section 8. Do not breathe dust. Avoid contact with skin, eyes and clothing. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Ensure equipment is adequately earthed. Use explosion-proof equipment. Use only non-sparking tools.

6.1.2. For emergency responders

For emergency responders

: Ensure procedures and training for emergency decontamination and disposal are in place. Concerning personal protective equipment to use, see section 8.

6.2. Environmental precautions

Do not allow to enter into surface water or drains. Notify authorities if product enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up

: Stop leak if safe to do so. Dam up the solid spill. Take up mechanically (sweeping, shovelling) and collect in suitable container for disposal. Large spills: scoop solid spill into closing containers. This material and its container must be disposed of in a safe way, and as per local legislation. Avoid dust formation. Knock down/dilute dust cloud with water spray.

6.4. Reference to other sections

Concerning personal protective equipment to use, see section 8. Concerning disposal elimination after cleaning, see section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling

: Provide adequate ventilation. Use personal protective equipment as required. Concerning personal protective equipment to use, see section 8. Do not breathe dust. Avoid contact with skin, eyes and clothing. Take any precaution to avoid mixing with Incompatible materials, Refer to Section 10 on Incompatible Materials. Ensure proper process control to avoid excess waste discharge (temperature, concentration, pH, time). Avoid release to the environment. Avoid dust formation. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Ground/bond container and receiving equipment. Use explosion-proof equipment.

Use only non-sparking tools.

Hygiene measures : Keep good industrial hygiene. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Do not eat, drink or smoke when using this product. Keep away from food, drink and animal

feedingstuffs. Remove contaminated clothes. Separate working clothes from town

clothes. Launder separately. Wash contaminated clothing before reuse.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Avoid dust formation.

Storage conditions : Store in a dry, cool and well-ventilated place. Do not store near or with any of the

incompatible materials listed in section 10.

Incompatible substances or mixtures : Hydrogen fluoride.

Incompatible materials : Keep away from strong acids, strong bases and oxidizing agents.

Storage area : Keep as dry as reasonably practicable.
Packaging materials : Keep only in the original container.

7.3. Specific end use(s)

No data available.

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SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Additional information : Personal air monitoring : Recommended monitoring

procedures

8.2. Exposure controls

Engineering measure(s) : Provide adequate ventilation. Organisational measures to prevent /limit releases,

dispersion and exposure. Safe handling: see section 7. Apply measures to prevent

dust explosions. Ensure equipment is adequately earthed.

Personal protective equipment : The type of protective equipment must be selected according to the concentration

and amount of the dangerous substance at the specific workplace.

Hand protection : Wear chemically resistant gloves (tested to EN374) . Suitable material: neoprene

gloves, Latex gloves, rubber or plastic gloves, leather gloves, neoprene gloves (>0.3mm, BTT: 8h). The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of

hazardous substances.

Eye protection : Use suitable eye protection. (EN166): Safety glasses with side shields

Body protection : Wear suitable protective clothing.

Respiratory protection : Not required for normal conditions of use. In case of insufficient ventilation, wear

suitable respiratory equipment. Effective dust mask (EN 149). Half-face mask (EN

140). full face mask (DIN EN 136). Filter type: P (EN 143)

Thermal hazard protection : Not required for normal conditions of use. Use dedicated equipment.

Environmental exposure controls : Avoid release to the environment. Comply with applicable Community environmental

protection legislation.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Solid

Appearance : Powder. Granulate.

Colour : white. Odour : odourless. Odour threshold : Not applicable : Not applicable Relative evaporation rate (butylacetate=1) : No data available Melting / freezing point : No data available Freezing point : No data available Initial boiling point and boiling range : No data available : Not applicable Flash point Auto-ignition temperature : Not applicable

Decomposition temperature : 350 °C

Flammability (solid, gas) : Not flammable, Not combustible, Not self-igniting

Vapour pressure : Not applicable
Vapour density : Not applicable
Relative density : Not applicable
Solubility : Water: Insoluble
Partition coefficient n-octanol/water : No data available
Kinematic viscosity : No data available
Dynamic viscosity : No data available

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Explosive properties : Not applicable. The study does not need to be conducted because there are no

chemical groups associated with explosive properties present in the molecule.

Oxidising properties : Not applicable. The classification procedure needs not to be applied because there are no chemical groups present in the molecule which are associated with oxidising

properties.

Explosive limits : No data available

9.2. Other information

No data available

SECTION 10: Stability and reactivity

10.1. Reactivity

Reference to other sections: 10.4 & 10.5.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

Safe handling: see section 7.

10.5. Incompatible materials

Safe handling: see section 7.

10.6. Hazardous decomposition products

Reference to other sections: 5.2.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified (Based on available data, the classification criteria are not met.)

Skin corrosion/irritation : Not classified (Based on available data, the classification criteria are not met.)

pH: Not applicable

Serious eye damage/irritation : Not classified (Based on available data, the classification criteria are not met.)

pH: Not applicable

Respiratory or skin sensitisation : Not classified (Based on available data, the classification criteria are not met.)

Germ cell mutagenicity : Not classified (Based on available data, the classification criteria are not met.)

Carcinogenicity : Not classified (Based on available data, the classification criteria are not met.)

Carcinogenicity : Not classified (Based on available data, the classification criteria are not met.)

Reproductive toxicity : Not classified (Based on available data, the classification criteria are not met.)

STOT-single exposure : Not classified (Based on available data, the classification criteria are not met.)

STOT-repeated exposure : Not classified (Based on available data, the classification criteria are not met.)

Aspiration hazard : Not classified (Based on available data, the classification criteria are not met.)

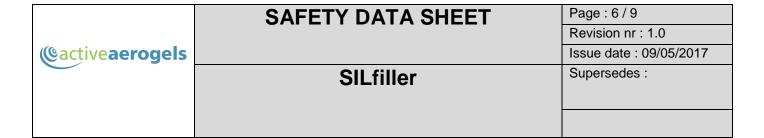
Other information : Symptoms related to the physical, chemical and toxicological characteristics. For

further information see section 4.

SECTION 12: Ecological information

12.1. Toxicity

Environmental properties : According to the criteria of the European classification and labelling system, the substance/the product has not to be labelled as "dangerous for the environment".



12.2. Persistence and degradability

SILfiller	
Persistence and degradability	The study does not need to be conducted because the substance is inorganic.

12.3. Bioaccumulative potential

SILfiller	
Partition coefficient n-octanol/water	No data available
Bioaccumulative potential	There is no bioaccumulation.

12.4. Mobility in soil

SILfiller	
Mobility in soil	No data available

12.5. Results of PBT and vPvB assessment

SILfiller	
Results of PBT assessment	No data available

12.6. Other adverse effects

Other adverse effects : No data available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product/Packaging disposal recommendations

: Avoid release to the environment. Dispose of empty containers and wastes safely. Safe handling: see section 7. Refer to manufacturer/supplier for information on recovery/recycling. Recycling is preferred to disposal or incineration. If recycling is not possible, eliminate in accordance with local valid waste disposal regulations. Handle contaminated packages in the same way as the substance itself. Dispose of contaminated materials in accordance with current regulations.

European waste catalogue (2001/573/EC, :

75/442/EEC, 91/689/EEC)

This material and its container must be disposed of as hazardous waste Waste codes should be assigned by the user, preferably in discussion with the waste disposal authorities.

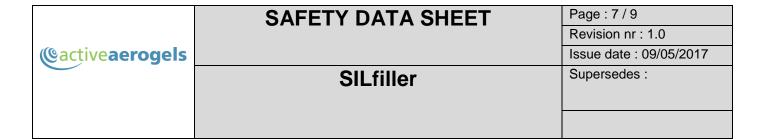
SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

			RID
Not applicable	Not applicable	Not applicable	Not applicable
shipping name	<u> </u>	<u></u>	II.
Not applicable	Not applicable	Not applicable	Not applicable
Not applicable	Not applicable	Not applicable	Not applicable
nazard class(es)			
Not applicable	Not applicable	Not applicable	Not applicable
Not applicable	Not applicable	Not applicable	Not applicable
oup		<u></u>	
Not applicable	Not applicable	Not applicable	Not applicable
ntal hazards	•	•	•
Not applicable	Not applicable	Not applicable	Not applicable
	Not applicable Oup Not applicable ntal hazards	Not applicable shipping name Not applicable	Not applicable Shipping name Not applicable Not applicable

14.6. Special precautions for user

Special precautions for user : No data available



- Overland transport

Not applicable

- Transport by sea

Not applicable

- Air transport

Not applicable

- Inland waterway transport

Not applicable

- Rail transport

Not applicable

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Code: IBC : No data available.

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

No REACH Annex XVII restrictions
SILfiller is not on the REACH Candidate List
SILfiller is not on the REACH Annex XIV List

15.1.2. National regulations

France

No ICPE	Installations classées Désignation de la rubrique	Code Régime	Rayon
3420.text	Fabrication en quantité industrielle par transformation chimique ou biologique de produits chimiques inorganiques, tels que :		
3420.e	e) Non-métaux, oxydes métalliques ou autres composés inorganiques, tels que carbure de calcium, silicium, carbure de silicium	А	3

Germany

German storage class (LGK) : LGK 13 - Non-combustible solids

12th Ordinance Implementing the Federal

Immission Control Act - 12.BlmSchV

: Is not subject of the 12. BlmSchV (Hazardous Incident Ordinance)

TA Luft : 5.2.1 Total Dust, including Micro Dust

Netherlands

Waterbezwaarlijkheid : 11 - Weinig schadelijk voor in het water levende organismen

Saneringsinspanningen : A - In principe niet lozen; zo ja, dan toepassen van beste bestaande technieken

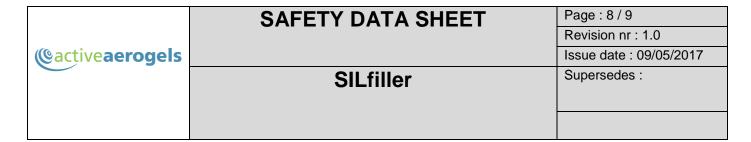
SZW-lijst van kankerverwekkende stoffen : The substance is not listed SZW-lijst van mutagene stoffen : The substance is not listed NIET-limitatieve lijst van voor de : The substance is not listed

voortplanting giftige stoffen - Borstvoeding

NIET-limitatieve lijst van voor de : The substance is not listed

voortplanting giftige stoffen -

Vruchtbaarheid



NIET-limitatieve lijst van voor de : voortplanting giftige stoffen – Ontwikkeling

: The substance is not listed

15.2. Chemical safety assessment

Chemical safety assessments for substances in this mixture were not carried out

SECTION 16: Other information

Abbreviations and acronyms:

 ABM = Algemene beoordelingsmethodiek
ADN = Accord Européen relatif au Transport International des Marchandises Dangereuses par voie de Navigation du Rhin ADR = Accord européen relatif au transport international des marchandises Dangereuses par Route CLP = Classification, Labelling and Packaging Regulation according to 1272/2008/EC IATA = International Air Transport Association IMDG = International Maritime Dangerous Goods Code LEL = Lower Explosive Limit/Lower Explosion Limit UEL = Upper Explosion Limit/Upper Explosive Limit REACH = Registration, Evaluation, Authorisation and Restriction of Chemicals
 BTT = Breakthrough time (maximum wearing time)
 DMEL = Derived Minimal Effect level
 DNEL = Derived No Effect Level
 EC50 = Median Effective Concentration
 EL50 = Median effective level
 ErC50 = EC50 in terms of reduction of growth rate
 ErL50 = EL50 in terms of reduction of growth rate
 EWC = European waste catalogue
 LC50 = Median lethal concentration
 LD50 = Median lethal dose
 LL50 = Median lethal level
NA = Not applicable
 NOEC = No observed effect concentration
 NOEL: no-observed-effect level
 NOELR = No observed effect loading rate
NOAEC = No observed adverse effect concentration
NOAEL = No observed adverse effect level
N.O.S. = Not Otherwise Specified
OEL = Occupational Exposure Limits - Short Term Exposure Limits (STELs)
PNEC = Predicted No Effect Concentration
 Quantitative structure-activity relationship (QSAR)
 STOT = Specific Target Organ Toxicity
TWA = time weighted average
VOC = Volatile organic compounds
 WGK = Wassergefährdungsklasse (Water Hazard Class under German Federal Water Management Act)

Sources of key data used to compile the

datasheet

: Supplier info.

Training advice

: Training staff on good practice. Manipulations are to be done only by qualified and authorised persons.

According to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830 Classification according to Regulation (EC) No. 1272/2008 [CLP] Labelling according to Regulation (EC) No. 1272/2008 [CLP]

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