



DRAWIN

Safety Data Sheet (1907/2006/EC)

Material: 60081499

SILPURAN® 4200

Version: 3.4 (GB)

Date of print: 03.11.2022

Date of last alteration: 31.05.2022

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

1.1 Product identifier

Commercial product name: SILPURAN® 4200

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

Use of substance / preparation:

Industrial.

medical applications .

1.3 Details of the supplier of the safety data sheet

Manufacturer/distributor:

Street/POB-No.:

State/postal code/city:

Telephone:

DRAWIN Vertriebs-GmbH

Rudolf-Diesel-Straße 15

D 85521 Riemerling

+49 89 60869-0

Contact point:

Street/POB-No.:

Postal code/city:

Country:

Telephone:

Wacker Chemicals Ltd.

2 Arlington Square, Downshire Way

Bracknell RG12 1WA

United Kingdom

+44 1344 401 670

Information about the Safety Data Sheet:

Telephone

+49 8677 83-4888

eMail

WLCP-MSDS@wacker.com

1.4 Emergency telephone number

Emergency Information:

+44 1273 289451

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008:

Not a hazardous substance or mixture.

2.2 Label elements

Labelling according to Regulation (EC) No. 1272/2008:

No labeling according to GHS required.

Code	Additional Labelling
EUH210	Safety data sheet available on request.

2.3 Other hazards

No data available.

SECTION 3: Composition/information on ingredients

3.1 Substances

not applicable

3.2 Mixtures

3.2.1 Chemical characteristics

Polydimethylsiloxane and fillers and auxiliaries and acetoxysilane cross-linker



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3.2.2 Hazardous ingredients

Type	CAS No.	EC-No. REACH no.	Substance	Content %	Classification according to Regulation (EC) No. 1272/2008*	Comment
INHA	4253-34-3	224-221-9 01-2119962266-32	Triacetoxymethylsilane	<5	Skin Corr. 1C; H314 Acute Tox. 4 oral; H302 Eye Dam. 1; H318 EUH014	[1]

Type: INHA: ingredient, VERU: impurity

[1] = Hazardous or environmentally harmful substance; [2] = substance with a Community workplace exposure limit; [3] = PBT substance; [4] = vPvB substance

*Classification codes are explained in section 16.

This product does not contain substances of very high concern (Regulation (EC) No 1907/2006 (REACH), Article 57) in amounts above $\geq 0.1\%$.

SECTION 4: First aid measures

4.1 Description of first aid measures

General information:

Take persons to a safe place. Observe self-protection for first aid. Seek medical advice in the event of contact with this substance.

After contact with the eyes:

Rinse immediately with plenty of water for 10-15 minutes. Keep eyelids well open to rinse the whole eye surface and eyelids with water. Seek medical advice and clearly identify substance.

After contact with the skin:

Wipe off excess material with cloth or paper. Remove contaminated or soaked clothing. Wash off with plenty of water or water and soap immediately for 10-15 minutes. In serious cases, use emergency shower immediately. Seek medical advice and clearly identify substance.

After inhalation:

Keep the patient calm. Protect against loss of body heat. Seek medical advice and clearly identify substance.

After swallowing:

If conscious, give several small portions of water to drink. Do not induce vomiting. Seek medical advice and clearly identify substance.

4.2 Most important symptoms and effects, both acute and delayed

Any relevant information can be found in other parts of this section.

4.3 Indication of any immediate medical attention and special treatment needed

Further toxicology information in section 11 must be observed.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media:

alcohol-resistant foam , carbon dioxide , water mist , sprinkler system , sand , extinguishing powder .

Extinguishing media which must not be used for safety reasons:

water jet .

5.2 Special hazards arising from the substance or mixture

Risk of hazardous gasses or fumes in the event of fire. Exposure to combustion products may be a health hazard! Hazardous combustion products: toxic and very toxic fumes .



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5.3 Advice for firefighters

Special protective equipment for fire fighting:

Use respiratory protection independent of recirculated air. Keep unprotected persons away.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Secure the area. Wear personal protection equipment (see section 8). Keep unprotected persons away. Avoid contact with eyes and skin. Do not inhale gases/vapours/aerosols. If material is released indicate risk of slipping. Do not walk through spilled material.

6.2 Environmental precautions

Prevent material from entering surface waters, drains or sewers and soil. Close leak if possible without risk. Retain contaminated water/extinguishing water. Dispose of in prescribed marked containers. Inform authorities if substance leaks into surface waters, sewerage or ground.

6.3 Methods and material for containment and cleaning up

Scoop up large quantities after dusting surfaces with sand or Fuller's earth to prevent sticking. Sweep or scrape up the spilled material and place in an appropriate chemical waste container. Clean any slippery coating that remains using a detergent / soap solution or another biodegradable cleaner. Apply sand or other inert granular material to improve traction.

Further information:

Exhaust vapours. Eliminate all sources of ignition. Consider explosion protection. Observe notes under section 7.

6.4 Reference to other sections

Relevant information in other sections has to be considered. This applies in particular for information given on personal protective equipment (section 8) and on disposal (section 13).

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Precautions for safe handling:

Ensure adequate ventilation. Must be syphoned off in situ. Keep away from incompatible substances in accordance with section 10. Observe information in section 8.

Precautions against fire and explosion:

Product may release acetic acid. Flammable vapors may accumulate and form explosive mixtures with air in containers, process vessels, including partial, empty and uncleaned containers and vessels, or other enclosed spaces. Keep away from sources of ignition and do not smoke. Take precautionary measures against electrostatic charging. Cool endangered containers with water.

7.2 Conditions for safe storage, including any incompatibilities

Conditions for storage rooms and vessels:

Observe local/state/federal regulations.

Advice for storage of incompatible materials:

Observe local/state/federal regulations.

Further information for storage:

Store in a dry and cool place. Protect against moisture. Store container in a well ventilated place.

Minimum temperature allowed during storage and transportation: 0 °C

Maximum temperature allowed during storage and transportation: 35 °C

7.3 Specific end use(s)

No data available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters



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Maximum airborne concentrations at the workplace:

Substance	Type	mg/m ³	ppm	Dust fract.	Fibre/m ³
Acetic acid	OEL	25,0	10,0		
Acetic acid	EU	25,0	10,0		

Acetic acid: The short-time value of the EU threshold is same value of the EU threshold is 50 mg/m³ (= 20 ppm).

Derived No-Effect Level (DNEL):**Triacetoxymethylsilane**

Area of use:	Value:
Worker; by inhalation; systemic (long term) systemic (acute)	25 mg/m ³
Worker; dermal; systemic (long term) systemic (acute)	14,5 mg/kg/day
Consumer; by inhalation; local (long term) local (acute)	5,1 mg/m ³
Consumer; dermal; systemic (long term) systemic (acute)	7,2 mg/kg/day
Consumer; oral; systemic (long term) systemic (acute)	1 mg/kg/day

Predicted No Effect Concentration (PNEC):**Triacetoxymethylsilane**

Area of use:	Value:
freshwater	1,0 mg/l The value was derived for the corresponding silanetriol (hydrolysis product).
marine water	0,10 mg/l The value was derived for the corresponding silanetriol (hydrolysis product).
Intermittent release	10 mg/l The value was derived for the corresponding silanetriol (hydrolysis product).
Sediment (freshwater)	0,80 mg/kg wet weight The value was derived for the corresponding silanetriol (hydrolysis product).
Sediment (marine water)	0,080 mg/kg wet weight The value was derived for the corresponding silanetriol (hydrolysis product).
Soil	0,13 mg/kg wet weight The value was derived for the corresponding silanetriol (hydrolysis product).
sewage treatment plant	> 10 mg/l

8.2 Exposure controls**8.2.1 Exposure in the work place limited and controlled****General protection and hygiene measures:**

Observe standard industrial hygiene practices for the handling of chemical substances. Do not inhale gases/vapours/aerosols. Use with adequate ventilation. Avoid contact with eyes and skin. Preventive skin protection recommended. Remove contaminated, soaked clothing immediately. Clean work areas regularly. Provide emergency shower and eye-bath. Do not eat, drink or smoke when handling.

Further information for system design and engineering measures

Observe information in section 7. Observe national regulatory requirements.

Personal protection equipment:**Respiratory protection**

If inhalative exposure above the occupational exposure limit cannot be excluded, adequate respiratory protection equipment must be used. Suitable respiratory equipment: Respirator with a full face mask, according to acknowledged standards such as EN 136. Recommended Filter type: Gas filter type ABEK (certain inorganic, organic and acidic gases and vapors; ammonia/amines), according to acknowledged standards such as EN 14387



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Observe the equipment manufacturer's information and wear time limits for respirators.

Eye protection

protective goggles .

Hand protection

Protective gloves are required at all times when handling the material, according to recognized standards such as EN374.

Recommended glove types: Protective gloves made of butyl rubber

thickness of the material: > 0,3 mm

Breakthrough time: > 480 min

Recommended glove types: Protective gloves made of nitrile rubber

thickness of the material: > 0,1 mm

Breakthrough time: 60 - 120 min

Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time. Note that, due to the numerous external influences (such as temperature), a chemically resistant protective glove in daily use may have a service life that is considerably shorter than the measured break through time.

Skin protection

protective clothing .

8.2.2 Exposure to the environment limited and controlled

Prevent material from entering surface waters, drains or sewers and soil.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Property:	Value:	Method:
Appearance		
Physical state	liquid (23 °C / 1.013 hPa)	
Form	paste	
Colour	colourless	
Odour		
Odour	pungent	
Odour limit		
Odour limit	no data available	
pH-Value		
pH-Value	Not applicable. Product displays acidic reaction with water.	
Melting point/freezing point		
Melting point / melting range	not applicable	
Initial boiling point and boiling range		
Boiling point / boiling range	not applicable	
Flash point		
Flash point	not applicable	
Evaporation rate		
Evaporation rate	no data available	
Upper/lower flammability or explosive limits		
Lower explosion limit (LEL)	not applicable	
Vapour pressure		
Vapour pressure	not applicable	
Solubility(ies)		
Water solubility / miscibility	insoluble at 20 °C	
Vapour density		
Relative gas/vapour density	No data known.	



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Relative DensityRelative Density: 1,11 (23 °C; 1013 hPa) (DIN EN ISO 2811-2)
(Water / 4 °C = 1,00)Density: 1,11 g/cm³ (23 °C; 1013 hPa) (DIN EN ISO 2811-2)**Partition coefficient: n-octanol/water**

Partition coefficient: n-octanol/water.....: No data known.

Auto-ignition temperature

Ignition temperature: 453 °C (EN 14522)

Decomposition temperature

Thermal decomposition: no data available

ViscosityViscosity (dynamic): 250000 mPa.s at 25 °C (DIN EN ISO 3219)
shear rate : 0,5 1/SViscosity (dynamic): 150000 mPa.s at 25 °C (DIN EN ISO 3219)
shear rate : 25 1/S**Molecular mass**

Molecular mass: not applicable

9.2 Other information

Explosion limits for released acetic acid: 4 - 17%(V).

SECTION 10: Stability and reactivity

10.1 – 10.3 Reactivity; Chemical stability; Possibility of hazardous reactions

If stored and handled in accordance with standard industrial practices no hazardous reactions are known.

Relevant information can possibly be found in other parts of this section.

10.4 Conditions to avoid

Moisture, heat, open flames, and other sources of ignition.

10.5 Incompatible materials

Reacts with: water , basic substances and alcohols . The reaction takes place with the formation of acetic acid.

10.6 Hazardous decomposition products

Acetic acid by hydrolysis. Measurements have shown the formation of small amounts of formaldehyde at temperatures above about 150 °C (302 °F) through oxidation.

SECTION 11: Toxicological information

11.1 Information on toxicological effects**11.1.1 Acute toxicity****Product details:**

Route of exposure	Result/Effect	Species/Test system	Source
Oral	LD50: > 2000 mg/kg	Rat	Expert judgement
dermal	LD50: > 2000 mg/kg	Rabbit	Expert judgement

11.1.2 Skin corrosion/irritation**Product details:**

Result/Effect	Species/Test system	Source
No skin irritation	Rabbit	OECD 404
Bridging principle "Substantially similar mixtures".		

11.1.3 Serious eye damage / eye irritation



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Product details:

Result/Effect	Species/Test system	Source
No eye irritation Bridging principle "Substantially similar mixtures".	in vitro assay; Bovine cornea	OECD 437
No eye irritation Bridging principle "Substantially similar mixtures".	Rabbit	OECD 405

11.1.4 Respiratory or skin sensitization

Assessment:

For this endpoint no toxicological test data is available for the whole product.

11.1.5 Germ cell mutagenicity

Assessment:

For this endpoint no toxicological test data is available for the whole product.

11.1.6 Carcinogenicity

Assessment:

For this endpoint no toxicological test data is available for the whole product.

11.1.7 Reproductive toxicity

Assessment:

For this endpoint no toxicological test data is available for the whole product.

11.1.8 Specific target organ toxicity (single exposure)

Assessment:

For this endpoint no toxicological test data is available for the whole product.

11.1.9 Specific target organ toxicity (repeated exposure)

Assessment:

For this endpoint no toxicological test data is available for the whole product.

11.1.10 Aspiration hazard

Assessment:

Based on the physical-chemical properties of the product no aspiration hazard must be expected.

11.1.11 Further toxicological information

In contact with dampness product separates a small quantity of acetic acid (64-19-7) which irritates skin and mucous membranes.

SECTION 12: Ecological information

12.1 Toxicity

Assessment:

Evaluation on basis of physical-chemical properties: No expected damaging effects to aquatic organisms.

12.2 Persistence and degradability

Assessment:

Polymer component: biologically not degradable. Elimination by adsorption to activated sludge.

12.3 Bioaccumulative potential

Assessment:

Polymer component: No adverse effects expected.



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12.4 Mobility in soil

Assessment:

Polymer component: insoluble in water.

12.5 Results of PBT and vPvB assessment

No data available.

12.6 Other adverse effects

none known

SECTION 13: Disposal considerations

13.1 Waste treatment methods

13.1.1 Material

Recommendation:

Material that cannot be used, reprocessed or recycled should be disposed of in accordance with Federal, State, and local regulations at an approved facility. Depending on the regulations, waste treatment methods may include, e.g., landfill or incineration.

13.1.2 Uncleaned packaging

Recommendation:

Completely discharge containers (no tear drops, no powder rest, scraped carefully). Containers may be recycled or re-used. Observe local/state/federal regulations. Uncleaned packaging should be treated with the same precautions as the material.

13.1.3 Waste Disposal Legislation Ref.No.(EC)

It is not possible to determine a waste code for this product in accordance with the European Waste Catalogue (EWC) since it is only possible to classify it according to how it is used by the customer. The waste code is to be determined within the EU in liaison with the waste-disposal operator.

SECTION 14: Transport information

14.1 – 14.4 UN number; UN proper shipping name; Transport hazard class(es); Packing group

Road ADR:

Valuation: Not regulated for transport

Railway RID:

Valuation: Not regulated for transport

Transport by sea IMDG-Code:

Valuation: Not regulated for transport

Air transport ICAO-TI/IATA-DGR:

Valuation: Not regulated for transport

14.5 Environmental hazards

Hazardous to the environment: no

14.6 Special precautions for user

Relevant information in other sections has to be considered.

14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code

Bulk transport in tankers is not intended.

SECTION 15: Regulatory information

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

National and local regulations must be observed.



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For information on labelling please refer to section 2 of this document.

Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances (Seveso III):

Not applicable

Relevant regulations:

SI 2002/1689: CHIP Regulations 2002

SI 2002/2677: COSHH Regulations 2002

SI 1999/3242: Management of Health & Safety at Work Regulations 1999

Health & Safety at Work Act 1974

SI 1993/1643: Environmental Protection Act 1993 & Subsidiary Regulations.

Other national and local measures relating to the workplace, pollution control, environmental protection and waste control.

Other specifications, restrictions and prohibitions:

Regulation (EC) No 649/2012 of the European Parliament and the Council concerning the export and import of dangerous chemicals: Not applicable

Regulation (EU) 2019/1148 on the marketing and use of explosives precursors - ANNEX I. RESTRICTED EXPLOSIVES
PRECURSORS: Not applicable

Regulation (EU) 2019/1148 on the marketing and use of explosives precursors - ANNEX II. REPORTABLE EXPLOSIVES
PRECURSORS: Not applicable

Details of international registration status

Relevant information about individual substance inventories, where available, is given below.

Japan	ENCS (Handbook of Existing and New Chemical Substances): This product is listed in, or complies with, the substance inventory.
Australia	AIIC (Australian Inventory of Industrial Chemicals): This product is listed in, or complies with, the substance inventory.
China.....	IECSC (Inventory of Existing Chemical Substances in China): This product is listed in, or complies with, the substance inventory.
Canada	DSL (Domestic Substance List): This product is listed in, or complies with, the substance inventory.
Philippines.....	PICCS (Philippine Inventory of Chemicals and Chemical Substances): This product is listed in, or complies with, the substance inventory.
United States of America (USA).....	TSCA (Toxic Substance Control Act Chemical Substance Inventory): All components of this product are listed as active or are in compliance with the substance inventory.
Taiwan	TCSI (Taiwan Chemical Substance Inventory): This product is listed in, or complies with, the substance inventory. General note: The Taiwanese chemicals regulation requires a phase 1 registration for TCSI-listed or TCSI-compliant substances if imports to Taiwan or manufacturing in Taiwan exceed the trigger quantity of 100 kg/a (for mixtures to be calculated per each ingredient). It is the duty of the importing/manufacturing legal entity to take care of this obligation.
European Economic Area (EEA).....	REACH (Regulation (EC) No 1907/2006): General note: the registration obligations for substances imported into the EEA or manufactured within the EEA by the supplier mentioned in section 1 are fulfilled by the said supplier. The registration obligations for substances imported into the EEA by customers or other downstream users must be fulfilled by the latter.
South Korea (Republic of Korea)	AREC (Act on Registration and Evaluation of Chemicals; "K-REACH"): Please approach your regular contact for more detailed information.

15.2 Chemical safety assessment

Due to the results of the chemical safety assessment, exposure scenarios and identified uses are not of relevance for this safety data sheet.



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SECTION 16: Other information

16.1 Material

The details in this document are based on the state of our knowledge at the time of revision. They do not constitute an assurance of the described product properties in terms of statutory warranty requirements.

The providing of this document to a recipient does not relieve the recipient of his or her responsibility toward compliance with all laws and stipulations applicable to the product. This applies in particular to the further sale or distribution of the product or substances or items containing the product, in other jurisdictions and with regard to the protection of third-party intellectual property rights. If the described product is processed or mixed with other substances or materials, the details stated in this document cannot be conferred to the resultant new product unless this has been expressly mentioned. If the product is repackaged, the recipient is obligated to additionally provide the required safety-related information.

WACKER restricts the use of its products inside the human body or in contact with bodily fluids and mucosa. For further details please review our Health Care Policy on www.wacker.com. WACKER may cancel any delivery obligation(s) if the Health Care Policy is not observed.

16.2 Further information:

Commas appearing in numerical data denote a decimal point. Vertical lines in the left-hand margin indicate changes compared with the previous version. This version supersedes all previous versions.

Explanation of the GHS classification code:

Skin Corr. 1C; H314....: Skin corrosion/irritation Category 1C; Causes severe skin burns and eye damage.

Acute Tox. 4; H302, Acute toxicity Category 4; Harmful if swallowed.

Eye Dam. 1; H318.....: Serious eye damage/eye irritation Category 1; Causes serious eye damage.

EUH014: Reacts violently with water.

- End of Safety Data Sheet -