

Safety data sheet

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BASF Safety data sheet according to Regulation UK SI 2019/758 and UK SI 2020/1577 as amended from

time to time.

Date / Revised: 21.04.2022 Version: 5.0

Date previous version: 06.12.2021 Previous version: 4.0 Date / First version: 20.10.2015

Product: Serifel

(ID no. 30589233/SDS_CPA_GB/EN)

Date of print 22.04.2022

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

1.1. Product identifier

Serifel

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

Relevant identified uses: Biological beneficial agent

1.3. Details of the supplier of the safety data sheet

Company: BASF SE 67056 Ludwigshafen GERMANY Contact address:
BASF plc

4th and 5th Floors, 2 Stockport Exchange Railway Road, Stockport, SK1 3GG

UNITED KINGDOM

Telephone: +44 161 475 3000

E-mail address: product-safety-north@basf.com

1.4. Emergency telephone number

International emergency number: Telephone: +49 180 2273-112

SECTION 2: Hazards Identification

2.1. Classification of the substance or mixture

For the classification of the mixture the following methods have been applied: extrapolation on the concentration levels of the hazardous substances, on basis of test results and after evaluation of experts. The methodologies used are mentioned at the respective test results.

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According to GB-CLP Regulations UK SI 2019/720 and UK SI 2020/1567

No need for classification according to GHS criteria for this product.

2.2. Label elements

Globally Harmonized System (GHS) in accordance with UK regulations.

Hazard Statement:

EUH210 Safety data sheet available on request.

EUH212 Warning! Hazardous respirable dust may be formed when used. Do not

breathe dust.

EUH401 To avoid risks to human health and the environment, comply with the

instructions for use.

Precautionary Statement:

P101 If medical advice is needed, have product container or label at hand.

P102 Keep out of reach of children.

P103 Read carefully and follow all instructions.

Micro-organisms may have the potential to provoke sensitising reactions. The product does not require a hazard warning label in accordance with GHS criteria.

Labeling of special preparations (GHS):

Micro-organisms may have the potential to provoke sensitising reactions.

2.3. Other hazards

According to GB-CLP Regulations UK SI 2019/720 and UK SI 2020/1567

See section 12 - Results of PBT and vPvB assessment.

If applicable information is provided in this section on other hazards which do not result in classification but which may contribute to the overall hazards of the substance or mixture.

SECTION 3: Composition/Information on Ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Chemical nature

time to time.

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Contains: biological beneficial organism, Bacillus amyloliquefaciens MBI600

does not contain: Genetically modified organism

Hazardous ingredients (GHS)

According to GB-CLP Regulations UK SI 2019/720 and UK SI 2020/1567

Kaolin

Content (W/W): < 100 % CAS Number: 1332-58-7 EC-Number: 310-194-1

Anatase (TiO2)

Content (W/W): < 5 % CAS Number: 1317-70-0 EC-Number: 215-280-1

SECTION 4: First-Aid Measures

4.1. Description of first aid measures

Show container, label and/or safety data sheet to physician.

Remove contaminated clothing.

If inhaled:

Keep patient calm, remove to fresh air.

On skin contact:

Wash thoroughly with soap and water

On contact with eyes:

Wash affected eyes for at least 15 minutes under running water with eyelids held open.

On ingestion:

Rinse mouth and then drink 200-300 ml of water.

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

Symptoms: (Further) symptoms and / or effects are not known so far

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

Treatment: Treat according to symptoms (decontamination, vital functions), no known specific antidote.

SECTION 5: Fire-Fighting Measures

5.1. Extinguishing media

Suitable extinguishing media:

time to time.

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water spray, dry powder, foam

Unsuitable extinguishing media for safety reasons: carbon dioxide

5.2. Special hazards arising from the substance or mixture

Endangering substances: carbon monoxide, Carbon dioxide, nitrogen oxides, silica compounds, metal oxides

Advice: The substances/groups of substances mentioned can be released in case of fire.

5.3. Advice for fire-fighters

Special protective equipment:

Wear self-contained breathing apparatus and chemical-protective clothing.

Further information:

Collect contaminated extinguishing water separately, do not allow to reach sewage or effluent systems. Dispose of fire debris and contaminated extinguishing water in accordance with official regulations. In case of fire and/or explosion do not breathe fumes. Keep containers cool by spraying with water if exposed to fire.

SECTION 6: Accidental Release Measures

6.1. Personal precautions, protective equipment and emergency procedures

Avoid dust formation. Use personal protective clothing. Avoid contact with the skin, eyes and clothing.

6.2. Environmental precautions

Do not discharge into the subsoil/soil. Do not discharge into drains/surface waters/groundwater.

Do not allow contamination of public drains or surface or ground waters. Inform local water plc if spillage enters drains and the Environment Agency (England & Wales), the Scottish Environmental Protection Agency (Scotland), or the Environment and Heritage Service (Northern Ireland) if it enters surface or ground waters. Keep people and animals away.

6.3. Methods and material for containment and cleaning up

For small amounts: Contain with dust binding material and dispose of.

For large amounts: Sweep/shovel up.

Avoid raising dust. Dispose of absorbed material in accordance with regulations. Collect waste in suitable containers, which can be labeled and sealed. Clean contaminated floors and objects thoroughly with water and detergents, observing environmental regulations.

6.4. Reference to other sections

Information regarding exposure controls/personal protection and disposal considerations can be found in section 8 and 13.

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SECTION 7: Handling and Storage

7.1. Precautions for safe handling

No special measures necessary if stored and handled correctly. Ensure thorough ventilation of stores and work areas. When using do not eat, drink or smoke. Hands and/or face should be washed before breaks and at the end of the shift.

Protection against fire and explosion:

No special precautions necessary. The substance/product is non-combustible. Product is not explosive.

7.2. Conditions for safe storage, including any incompatibilities

Segregate from foods and animal feeds.

Further information on storage conditions: Keep away from heat. Protect against moisture. Protect from direct sunlight. Keep container tightly closed. Store protected against freezing.

Protect from temperatures below: 2 °C

Changes in the properties of the product may occur if substance/product is stored below indicated temperature for extended periods of time.

Protect from temperatures above: 25 °C

Changes in the properties of the product may occur if substance/product is stored above indicated temperature for extended periods of time.

7.3. Specific end use(s)

For the relevant identified use(s) listed in Section 1 the advice mentioned in this section 7 is to be observed.

SECTION 8: Exposure Controls/Personal Protection

8.1. Control parameters

Components with occupational exposure limits

1317-70-0: Anatase (TiO2)

TWA value 10 mg/m3 (WEL/EH 40 (UK)), Inhalable dust

TWA value 4 mg/m3 (WEL/EH 40 (UK)), Respirable dust

1332-58-7: Kaolin

TWA value 2 mg/m3 (WEL/EH 40 (UK)), Respirable dust

Refer to the current edition of HSE Guidance Note EH40 Occupational Exposure Limits (United Kingdom). For normal use and handling refer to the product label/leaflet.

8.2. Exposure controls

Personal protective equipment

Respiratory protection:

time to time.

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Suitable respiratory protection for higher concentrations or long-term effect: Particle filter with medium efficiency for solid and liquid particles (e.g. EN 143 or 149, Type P2 or FFP2)

Hand protection:

Suitable chemical resistant safety gloves (EN ISO 374-1) also with prolonged, direct contact (Recommended: Protective index 6, corresponding > 480 minutes of permeation time according to EN ISO 374-1): E.g. nitrile rubber (0.4 mm), chloroprene rubber (0.5 mm), butyl rubber (0.7 mm) etc.

Eye protection:

Safety glasses with side-shields (frame goggles) (e.g. EN 166)

Body protection:

Body protection must be chosen depending on activity and possible exposure, e.g. apron, protecting boots, chemical-protection suit (according to EN 14605 in case of splashes or EN ISO 13982 in case of dust).

General safety and hygiene measures

The statements on personal protective equipment in the instructions for use apply when handling crop-protection agents in final-consumer packing. Wearing of closed work clothing is recommended. Store work clothing separately. Keep away from food, drink and animal feeding stuffs.

SECTION 9: Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

Form: solid

Colour: white to light beige

Odour: musty

Odour threshold:

Not determined due to potential

health hazard by inhalation.

pH value: approx. 4 - 8

(20 °C)

Melting point:

The product has not been tested.

Boiling point:

The product has not been tested.

Flash point:

not applicable, the product is a solid

Evaporation rate:

not applicable

Flammability: Based on the structure or

composition there is no indication of

flammability

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Lower explosion limit:

As a result of our experience with this product and our knowledge of its composition we do not expect any hazard as long as the product is used appropriately and in accordance with

the intended use.

Upper explosion limit:

As a result of our experience with this product and our knowledge of its composition we do not expect any hazard as long as the product is used appropriately and in accordance with

the intended use.

Vapour pressure:

not applicable

Relative vapour density (air):

not applicable

Solubility in water: dispersible

Partitioning coefficient n-octanol/water (log Kow):

not applicable

Self ignition: Based on its structural properties the

product is not classified as self-

igniting.

Thermal decomposition: No decomposition if stored and handled as prescribed/indicated.

Viscosity, dynamic:

Explosion hazard:

not applicable, the product is a solid Product is not explosive, however a

dust explosion could result from an

air / dust mixture.

Fire promoting properties: Based on its structural properties

the product is not classified as

oxidizing.

9.2. Other information

Self heating ability: It is not a substance capable of

spontaneous heating.

Bulk density: 200 - 1,200 kg/m3

SECTION 10: Stability and Reactivity

10.1. Reactivity

No hazardous reactions if stored and handled as prescribed/indicated.

10.2. Chemical stability

The product is stable if stored and handled as prescribed/indicated.

time to time.

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10.3. Possibility of hazardous reactions

No hazardous reactions if stored and handled as prescribed/indicated.

10.4. Conditions to avoid

See SDS section 7 - Handling and storage.

10.5. Incompatible materials

Substances to avoid:

strong acids, strong bases, strong oxidizing agents

10.6. Hazardous decomposition products

Hazardous decomposition products:

No hazardous decomposition products if stored and handled as prescribed/indicated.

SECTION 11: Toxicological Information

11.1. Information on toxicological effects

Acute toxicity

Assessment of acute toxicity:

Virtually nontoxic after a single ingestion. Virtually nontoxic by inhalation. Virtually nontoxic after a single skin contact.

Experimental/calculated data:

LD50 rat (oral): > 5,000 mg/kg (OECD Guideline 425)

LC50 rat (by inhalation): > 5.23 mg/l (OECD Guideline 403)

LD50 rat (dermal): > 5,050 mg/kg (OECD Guideline 402)

Irritation

Assessment of irritating effects:

Not irritating to the skin. Not irritating to the eyes.

Experimental/calculated data:

Skin corrosion/irritation

rabbit: non-irritant (OECD Guideline 404)

Serious eye damage/irritation

rabbit: non-irritant (OECD Guideline 405)

Respiratory/Skin sensitization

Assessment of sensitization:

There is no evidence of a skin-sensitizing potential.

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Experimental/calculated data:

Buehler test guinea pig: Non-sensitizing.

Germ cell mutagenicity

Assessment of mutagenicity:

The product has not been tested. The statement has been derived from the properties of the individual components. Mutagenicity tests revealed no genotoxic potential.

Carcinogenicity

Assessment of carcinogenicity:

The product has not been tested. The statement has been derived from the properties of the individual components.

Information on: Anatase (TiO2) Assessment of carcinogenicity:

IARC (International Agency for Research on Cancer) has classified this substance as group 2B (The agent is possibly carcinogenic to humans). In long-term studies in rats in which the substance was given by inhalation, a carcinogenic effect was observed. Tumors were only observed in rats after chronic inhalative exposure to high concentrations which caused sustained lung inflammation. In long-term studies in rats and mice in which the substance was given by feed, a carcinogenic effect was not observed. Dermal exposure is not expected to be carcinogenic.

Reproductive toxicity

Assessment of reproduction toxicity:

The product has not been tested. The statement has been derived from the properties of the individual components. The results of animal studies gave no indication of a fertility impairing effect.

Developmental toxicity

Assessment of teratogenicity:

The product has not been tested. The statement has been derived from the properties of the individual components. Animal studies gave no indication of a developmental toxic effect at doses that were not toxic to the parental animals.

Specific target organ toxicity (single exposure)

Assessment of STOT single:

Based on the available information there is no specific target organ toxicity to be expected after a single exposure.

Remarks: The product has not been tested. The statement has been derived from the properties of the individual components.

Repeated dose toxicity and Specific target organ toxicity (repeated exposure)

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Assessment of repeated dose toxicity:

The product has not been tested. The statement has been derived from the properties of the individual components.

Information on: Kaolin

Assessment of repeated dose toxicity:

Repeated inhalative uptake of particles/dust reaching the alveoli may cause damage to the lungs.

Aspiration hazard

No aspiration hazard expected.

The product has not been tested. The statement has been derived from the properties of the individual components.

Other relevant toxicity information

Misuse can be harmful to health.

SECTION 12: Ecological Information

12.1. Toxicity

Assessment of aquatic toxicity:

There is a high probability that the product is not acutely harmful to aquatic organisms.

The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

Toxicity to fish:

LC50 (96 h) > 100 mg/l, Oncorhynchus mykiss

Aquatic invertebrates:

LC50 (48 h) > 100 mg/l, Daphnia magna

Aquatic plants:

EC50 (72 h) > 100 mg/l (growth rate), Pseudokirchneriella subcapitata

12.2. Persistence and degradability

Assessment biodegradation and elimination (H2O): not applicable

12.3. Bioaccumulative potential

Assessment bioaccumulation potential: not applicable

time to time.

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12.4. Mobility in soil

Assessment transport between environmental compartments:

Adsorption in soil: not applicable

12.5. Results of PBT and vPvB assessment

The product does not contain a substance fulfilling the PBT (persistent/bioaccumulative/toxic) criteria or the vPvB (very persistent/very bioaccumulative) criteria.

12.6. Other adverse effects

The product does not contain substances that are listed in Regulation (EC) 1005/2009 on substances that deplete the ozone layer.

12.7. Additional information

Other ecotoxicological advice:

Do not discharge product into the environment without control.

SECTION 13: Disposal Considerations

13.1. Waste treatment methods

Must be disposed of or incinerated in accordance with local regulations.

The UK Environmental Protection (Duty of Care) Regulations (EP) and amendments should be noted (United Kingdom).

Contaminated packaging:

Contaminated packaging should be emptied as far as possible and disposed of in the same manner as the substance/product.

SECTION 14: Transport Information

Land transport

ADR

Not classified as a dangerous good under transport regulations

UN number or ID number:
UN proper shipping name:
Transport hazard class(es):
Packing group:
Environmental hazards:
Special precautions for

Not applicable
Not applicable
Not applicable
Not applicable
Not applicable

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user

RID

Not classified as a dangerous good under transport regulations

UN number or ID number: Not applicable Not applicable UN proper shipping name: Not applicable Transport hazard class(es): Not applicable Packing group: Environmental hazards: Not applicable

Special precautions for None known

user

Inland waterway transport

ADN

Not classified as a dangerous good under transport regulations

UN number or ID number: Not applicable UN proper shipping name: Not applicable Transport hazard class(es): Not applicable Not applicable Packing group: Environmental hazards: Not applicable

Special precautions for

user:

None known

Transport in inland waterway vessel

Not evaluated

Sea transport

IMDG

Not classified as a dangerous good under transport regulations

UN number or ID number: Not applicable UN proper shipping name: Not applicable Transport hazard class(es): Not applicable Packing group: Not applicable Environmental hazards: Not applicable None known Special precautions for

user

Air transport

IATA/ICAO

Not classified as a dangerous good under transport regulations

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UN number or ID number:
UN proper shipping name:
Transport hazard class(es):
Packing group:
Environmental hazards:
Special precautions for

Not applicable
Not applicable
Not applicable
Not applicable
Not applicable
Not applicable

user

14.1. UN number or ID number

See corresponding entries for "UN number or ID number" for the respective regulations in the tables above.

14.2. UN proper shipping name

See corresponding entries for "UN proper shipping name" for the respective regulations in the tables above.

14.3. Transport hazard class(es)

See corresponding entries for "Transport hazard class(es)" for the respective regulations in the tables above.

14.4. Packing group

See corresponding entries for "Packing group" for the respective regulations in the tables above.

14.5. Environmental hazards

See corresponding entries for "Environmental hazards" for the respective regulations in the tables above.

14.6. Special precautions for user

See corresponding entries for "Special precautions for user" for the respective regulations in the tables above.

14.7. Maritime transport in bulk according to IMO instruments

Maritime transport in bulk is not intended.

SECTION 15: Regulatory Information

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

Prohibitions, Restrictions and Authorizations

Annex XVII of Regulation (EC) No 1907/2006: Number on List: 75

Restrictions of Regulation (EC) No 1907/2006, Annex XVII, do not apply for the intended use(s) of the product given in this SDS.

Directive 2012/18/EU - Control of Major Accident Hazards involving dangerous substances (EU):

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Listed in above regulation: no

This product is classified under the European CLP Regulation.

The data should be considered when making any assessment under the Control of Substances Hazardous to Health Regulations (COSHH), and related guidance, for example, 'COSHH Essentials' (United Kingdom).

15.2. Chemical Safety Assessment

Advice on product handling can be found in sections 7 and 8 of this safety data sheet.

SECTION 16: Other Information

For proper and safe use of this product, please refer to the approval conditions laid down on the

product label.

EUH210 Safety data sheet available on request.

EUH212 Warning! Hazardous respirable dust may be formed when used. Do not

breathe dust.

EUH401 To avoid risks to human health and the environment, comply with the

instructions for use.

Abbreviations

ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road. ADN = The European Agreement concerning the International Carriage of Dangerous Goods by Inland waterways. ATE = Acute Toxicity Estimates. CAO = Cargo Aircraft Only. CAS = Chemical Abstract Service. CLP = Classification, Labelling and Packaging of substances and mixtures. DIN = German national organization for standardization. DNEL = Derived No Effect Level. EC50 = Effective concentration median for 50% of the population. EC = European Community. EN = European Standards. IARC = International Agency for Research on Cancer. IATA = International Air Transport Association. IBC-Code = Intermediate Bulk Container code. IMDG = International Maritime Dangerous Goods Code. ISO = International Organization for Standardization. STEL = Short-Term Exposure Limit. LC50 = Lethal concentration median for 50% of the population. LD50 = Lethal dose median for 50% of the population. TLV = Threshold Limit Value. MARPOL = The International Convention for the Prevention of Pollution from Ships. NEN = Dutch Norm. NOEC = No Observed Effect Concentration. OEL = Occupational Exposure Limit. OECD = Organization for Economic Cooperation and Development. PBT = Persistent, Bioaccumulative and Toxic. PNEC = Predicted No Effect Level. PPM = Parts per million. RID = The European Agreement concerning the International Carriage of Dangerous Goods by Rail. TWA = Time Weight Average. UN-number = UN number at transport. vPvB = very Persistent and very Bioaccumulative.

The data contained in this safety data sheet are based on our current knowledge and experience and describe the product only with regard to safety requirements. This safety data sheet is neither a Certificate of Analysis (CoA) nor technical data sheet and shall not be mistaken for a specification agreement. Identified uses in this safety data sheet do neither represent an agreement on the corresponding contractual quality of the substance/mixture nor a contractually designated use. It is the responsibility of the recipient of the product to ensure any proprietary rights and existing laws and legislation are observed.

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