SAFETY DATA SHEET
SILIFEED 15/500

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

1.1. Product identifier

Product name SILIFEED 15/500

Product number 55950

REACH registration notes This product is not classified as hazardous, the information in this datasheet is given for guidance only.

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

Identified uses Binder Flocculating Agent

1.3. Details of the supplier of the safety data sheet

Supplier

Univar
Aquarius House
6 Mid Point Business Park
Bradford
BD3 7AY
+44 1274 267300
+44 1274 267306
sds@univar.com

1.4. Emergency telephone number

Emergency telephone SGS - +32 (0)3 575 55 55 (24h)

Sds No. 55950

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

Physical hazards Not Classified

Health hazards Not Classified

Environmental hazards Not Classified

2.2. Label elements

Hazard statements NC Not Classified

2.3. Other hazards

This product does not contain any substances classified as PBT or vPvB.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

SILIFEED 15/500

AMORPHOUS SILICA		**10 - 30%**
CAS number: 7631-86-9	EC number: 231-545-4	REACH registration number: 01-2119379499-16-XXXX

Classification
Not Classified

The full text for all hazard statements is displayed in Section 16.

Composition comments The data shown are in accordance with the latest EC Directives.

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation Move affected person to fresh air at once. Rinse nose and mouth with water. Get medical attention if any discomfort continues.

Ingestion Rinse mouth thoroughly with water. Give plenty of water to drink. Get medical attention if any discomfort continues.

Skin contact Remove affected person from source of contamination. Remove contaminated clothing. Wash skin thoroughly with soap and water. Get medical attention if any discomfort continues.

Eye contact Remove any contact lenses and open eyelids wide apart. Rinse immediately with plenty of water. Continue to rinse for at least 15 minutes. Get medical attention if any discomfort continues.

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

Eye contact May cause temporary eye irritation.

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

Notes for the doctor Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media Extinguish with alcohol-resistant foam, carbon dioxide, dry powder or water fog.

Unsuitable extinguishing media Do not use water jet as an extinguisher, as this will spread the fire.

5.2. Special hazards arising from the substance or mixture

Hazardous combustion products When heated, vapours/gases hazardous to health may be formed. Oxides of the following substances: Silicon.

5.3. Advice for firefighters

Special protective equipment for firefighters Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions Avoid inhalation of vapours and contact with skin and eyes. Wear protective clothing as described in Section 8 of this safety data sheet. Provide adequate ventilation. Do not allow to dry out.

6.2. Environmental precautions

SILIFEED 15/500

Environmental precautions Do not discharge into drains or watercourses or onto the ground. Spillages or uncontrolled discharges into watercourses must be reported immediately to the Environmental Agency or other appropriate regulatory body.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up Avoid the spillage or runoff entering drains, sewers or watercourses. Absorb spillage with non-combustible, absorbent material. Collect and place in suitable waste disposal containers and seal securely. Do not allow to dry out.

6.4. Reference to other sections

Reference to other sections For personal protection, see Section 8. For waste disposal, see Section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Usage precautions Avoid inhalation of vapours and contact with skin and eyes. Provide adequate ventilation.

Advice on general occupational hygiene Do not eat, drink or smoke when using this product. Wash after use and before eating, smoking and using the toilet.

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions Store in tightly-closed, original container in a dry, cool and well-ventilated place. Avoid contact with the following materials: Mild steel. Aluminium. Copper. Store at temperatures between 5°C and 35°C.

7.3. Specific end use(s)

Specific end use(s) The identified uses for this product are detailed in Section 1.2.

SECTION 8: Exposure Controls/personal protection

8.1. Control parameters

Occupational exposure limits

AMORPHOUS SILICA

Long-term exposure limit (8-hour TWA): WEL 2.4 mg/m³ respirable dust
Long-term exposure limit (8-hour TWA): WEL 6 mg/m³ inhalable dust
WEL = Workplace Exposure Limit

AMORPHOUS SILICA (CAS: 7631-86-9)

DNEL	Workers - Inhalation; Short term local effects: 4 mg/m³ Workers - Inhalation; Long term local effects: 4 mg/m³

8.2. Exposure controls

Protective equipment

Appropriate engineering controls Provide adequate ventilation.

Eye/face protection Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible. Unless the assessment indicates a higher degree of protection is required, the following protection should be worn: Tight-fitting safety glasses. Personal protective equipment for eye and face protection should comply with European Standard EN166.

SILIFEED 15/500

Hand protection	Chemical-resistant, impervious gloves complying with an approved standard should be worn if a risk assessment indicates skin contact is possible. The most suitable glove should be chosen in consultation with the glove supplier/manufacturer, who can provide information about the breakthrough time of the glove material. Polyvinyl chloride (PVC). Rubber (natural, latex). To protect hands from chemicals, gloves should comply with European Standard EN374.
Hygiene measures	When using do not eat, drink or smoke. Wash after use and before eating, smoking and using the toilet.
Respiratory protection	Respiratory protection complying with an approved standard should be worn if a risk assessment indicates inhalation of contaminants is possible. Particulate filter, type P3. Ensure all respiratory protective equipment is suitable for its intended use and is 'CE'-marked.

SECTION 9: Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

Appearance	Opaque liquid.
pH	pH (concentrated solution): 9 - 11
Melting point	0°C
Initial boiling point and range	100°C
Relative density	1.050 - 1.400
Solubility(ies)	Dispersible in water.
Partition coefficient	No information available.
Viscosity	< 50 mPa s
Explosive properties	Not considered to be explosive.
Oxidising properties	Does not meet the criteria for classification as oxidising.

9.2. Other information

Other information	No information available.

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity	Stable at normal ambient temperatures and when used as recommended.

10.2. Chemical stability

Stability	Stable at normal ambient temperatures and when used as recommended.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions	No information available.

10.4. Conditions to avoid

Conditions to avoid	Avoid excessive heat for prolonged periods of time. Do not allow to dry out.

10.5. Incompatible materials

Materials to avoid	Copper. Aluminium. Mild steel.

10.6. Hazardous decomposition products

SILIFEED 15/500

Hazardous decomposition products	When heated, vapours/gases hazardous to health may be formed. Oxides of the following substances: Silicon.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Toxicological effects Read-across data.

Acute toxicity - oral

Notes (oral LD_{50}) LD_{50} > 5000 mg/kg, Oral, Rat

Skin sensitisation

Skin sensitisation Not sensitising.

Germ cell mutagenicity

Genotoxicity - in vitro Ames test: Negative.

Inhalation Gas or vapour in high concentrations may irritate the respiratory system.

Ingestion May cause irritation.

Skin contact May be slightly irritating to skin.

Eye contact May cause temporary eye irritation.

Toxicological information on ingredients.

AMORPHOUS SILICA

Acute toxicity - oral

Notes (oral LD_{50}) LD_{50} >5000 mg/kg, Oral, Rat

Acute toxicity - dermal

Notes (dermal LD_{50}) LD_{50} >6000 mg/kg, Dermal, Rabbit

Acute toxicity - inhalation

Notes (inhalation LC_{50}) LC_0 >140->2000 mg/m³, Inhalation, Rat

Skin corrosion/irritation

Skin corrosion/irritation Not irritating. Rabbit OECD 404

Serious eye damage/irritation

Serious eye damage/irritation May cause temporary eye irritation. Rabbit OECD 405

Respiratory sensitisation

Respiratory sensitisation Based on available data the classification criteria are not met.

Skin sensitisation

Skin sensitisation Based on available data the classification criteria are not met.

Germ cell mutagenicity

Genotoxicity - in vitro Based on available data the classification criteria are not met.

Carcinogenicity

Carcinogenicity Based on available data the classification criteria are not met.

IARC carcinogenicity IARC Group 3 Not classifiable as to its carcinogenicity to humans.

SILIFEED 15/500

Reproductive toxicity

Reproductive toxicity - fertility Based on available data the classification criteria are not met.

Specific target organ toxicity - single exposure

STOT - single exposure No information available.

Specific target organ toxicity - repeated exposure

STOT - repeated exposure No information available.

Aspiration hazard

Aspiration hazard Based on available data the classification criteria are not met.

Inhalation Dust in high concentrations may irritate the respiratory system.

Ingestion May cause discomfort if swallowed.

Skin contact Prolonged skin contact may cause temporary irritation.

Eye contact May cause temporary eye irritation.

SECTION 12: Ecological Information

Ecotoxicity The product components are not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Ecological information on ingredients.

AMORPHOUS SILICA

Ecotoxicity The product components are not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

12.1. Toxicity

Toxicity Read-across data.

Acute aquatic toxicity

Acute toxicity - fish LC_{50}, 96 hours: > 5000 mg/l, Brachydanio rerio (Zebra Fish)

Acute toxicity - aquatic invertebrates EC_{50}, 48 hours: > 7600 mg/l, Freshwater invertebrates

Acute toxicity - aquatic plants EC_{50}, 48 hours: 120 mg/l, Selenastrum capricornutum
NOEC, 48 hours: 60 mg/l, Selenastrum capricornutum
EC10, 48 hours: 140 mg/l, Selenastrum capricornutum

Ecological information on ingredients.

AMORPHOUS SILICA

Toxicity Not considered toxic to fish.

Acute aquatic toxicity

Acute toxicity - fish LC_{50}, 96 hours: 5000 mg/l, Brachydanio rerio (Zebra Fish)

SILIFEED 15/500

Acute toxicity - aquatic invertebrates	EC_{50}, 48 hours: 7600 mg/l, Daphnia magna
Acute toxicity - aquatic plants	EC_{50}, 72 hours: 440 mg/l, Selenastrum capricornutum

12.2. Persistence and degradability

Persistence and degradability The product contains inorganic substances which are not biodegradable.

Ecological information on ingredients.

AMORPHOUS SILICA

Persistence and degradability	There are no data on the degradability of this product.

12.3. Bioaccumulative potential

Bioaccumulative potential Bioaccumulation is unlikely.

Partition coefficient No information available.

Ecological information on ingredients.

AMORPHOUS SILICA

Bioaccumulative potential	No data available on bioaccumulation.
Partition coefficient	No information available.

12.4. Mobility in soil

Mobility No information available.

Ecological information on ingredients.

AMORPHOUS SILICA

Mobility	The product is insoluble in water.

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB assessment This product does not contain any substances classified as PBT or vPvB.

Ecological information on ingredients.

AMORPHOUS SILICA

Results of PBT and vPvB assessment	This substance is not classified as PBT or vPvB according to current EU criteria.

12.6. Other adverse effects

Other adverse effects None known.

Ecological information on ingredients.

AMORPHOUS SILICA

Other adverse effects	None known.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

SILIFEED 15/500

General information Waste should be treated as controlled waste. Do not puncture or incinerate, even when empty.

Disposal methods Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.

SECTION 14: Transport information

General The product is not covered by international regulations on the transport of dangerous goods (IMDG, IATA, ADR/RID).

14.1. UN number

Not applicable.

14.2. UN proper shipping name

Not applicable.

14.3. Transport hazard class(es)

No transport warning sign required.

14.4. Packing group

Not applicable.

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant
No.

14.6. Special precautions for user

Not applicable.

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

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable.

SECTION 15: Regulatory information

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

EU legislation 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) (as amended).
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 (as amended).
Commission Regulation (EU) No 2015/830 of 28 May 2015.

15.2. Chemical safety assessment

Not applicable.

Inventories

Canada - DSL/NDSL
All the ingredients are listed or exempt.
DSL

US - TSCA
All the ingredients are listed or exempt.

SILIFEED 15/500

Australia - AICS
All the ingredients are listed or exempt.

Japan - MITI
All the ingredients are listed or exempt.

Korea - KECI
All the ingredients are listed or exempt.

China - IECSC
All the ingredients are listed or exempt.

Philippines – PICCS
All the ingredients are listed or exempt.

SECTION 16: Other information

SILIFEED 15/500

Abbreviations and acronyms used in the safety data sheet

ATE: Acute Toxicity Estimate.
ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.
ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways.
CAS: Chemical Abstracts Service.
DNEL: Derived No Effect Level.
IATA: International Air Transport Association.
IMDG: International Maritime Dangerous Goods.
Kow: Octanol-water partition coefficient.
LC_{50}: Lethal Concentration to 50 % of a test population.
LD_{50}: Lethal Dose to 50% of a test population (Median Lethal Dose).
PBT: Persistent, Bioaccumulative and Toxic substance.
PNEC: Predicted No Effect Concentration.
REACH: Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006.
RID: European Agreement concerning the International Carriage of Dangerous Goods by Rail.
vPvB: Very Persistent and Very Bioaccumulative.
IARC: International Agency for Research on Cancer.
MARPOL 73/78: International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978.
cATpE: Converted Acute Toxicity Point Estimate.
BCF: Bioconcentration Factor.
BOD: Biochemical Oxygen Demand.
EC_{50}: 50% of maximal Effective Concentration.
LOAEC: Lowest Observed Adverse Effect Concentration.
LOAEL: Lowest Observed Adverse Effect Level.
NOAEC: No Observed Adverse Effect Concentration.
NOAEL: No Observed Adverse Effect Level.
NOEC: No Observed Effect Concentration.
LOEC: Lowest Observed Effect Concentration.
DMEL: Derived Minimal Effect Level.
EL50: Exposure Limit 50
hPa: Hectopascal
LL50: Lethal Loading fifty
OECD: Organisation for Economic Co-operation and Development
POW: Octanol-water partition coefficient
SCBA: self-contained breathing apparatus
STP: Sewage Treatment Plant
VOC: Volatile Organic Compounds

Classification abbreviations and acronyms

Acute Tox. = Acute toxicity
Aquatic Acute = Hazardous to the aquatic environment (acute)
Aquatic Chronic = Hazardous to the aquatic environment (chronic)

Key literature references and sources for data

Supplier's information.

Revision comments

This is the first issue.

Revision date

24/09/2018

Version number

1.000

SDS number

55950

SDS status

Approved.

SILIFEED 15/500

Signature J Spenceley