SAFETY DATA SHEET

# OC-Biobinder® X4XXS

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

### 1.1. Product identifier

▼Trade name

OC-Biobinder® X4XXS

▼Product no.

1400S-1499S, 3400S-3499S, 5400S-5499S, 1451NS, 1451VS, 1451N (levererad från och med 18 oktober 2023), 1450WS

Unique formula identifier (UFI)

46F8-895P-W003-44XE

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

Relevant identified uses of the substance or mixture

Improve mechanical properties of fiber-based materials.
Restricted to professional users.

▼Uses advised against

Other products

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

Company and address

**OrganoClick AB**
Linjalvägen 9
SE-187 66 Täby
Sweden
+46 (0)8 674 00 80
www.organoclick.com

E-mail

info@organoclick.com

Revision

03/03/2025

SDS Version

4.3

Date of previous version

27/11/2023 (4.2)

### 1.4. Emergency telephone number

In urgent situations: Call 112 and request the poison information centre. (24h service)
In less severe situations: Call +46 10-456 6700 (24h service)
See also section 4 “First aid measures”.

## SECTION 2: Hazards identification

Classified according to Regulation (EC) No. 1272/2008 (CLP).

### 2.1. Classification of the substance or mixture

Skin Irrit. 2; H315, Causes skin irritation.
Eye Irrit. 2; H319, Causes serious eye irritation.

### 2.2. Label elements

Hazard pictogram(s)

Signal word
Warning
Hazard statement(s)
Causes skin irritation. (H315)
Causes serious eye irritation. (H319)
Precautionary statement(s)
General
-
Prevention
Wash hands thoroughly after handling. (P264)
Wear face protection/protective gloves/protective clothing. (P280)
Response
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. (P305+P351+P338)
If eye irritation persists: Get medical advice/attention. (P337+P313)
IF ON SKIN: Wash with plenty of water and soap. (P302+P352)
Take off contaminated clothing and wash it before reuse. (P362+P364)
Storage
-
Disposal
-
Hazardous substances
None known.
Additional labelling

UFI: 46F8-895P-W003-44XE

### 2.3. Other hazards

▼Additional warnings
This mixture/product does not contain any substances known to fulfil the criteria for PBT and vPvB classification. This product does not contain any substances considered to be endocrine disruptors in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2023/707.

## SECTION 3: Composition/information on ingredients

### 3.1. Substances

Not applicable. This product is a mixture.

### 3.2. Mixtures

| Product/substance | Identifiers | % w/w | Classification | Note |
|---|---|---|---|---|
| Lactic acid | CAS No.: 79-33-4<br>EC No.: 201-196-2<br>REACH: 01-2119474164-39-XXXX<br>Index No.: | 1-<3% | EUH071<br>Skin Corr. 1C, H314<br>Eye Dam. 1, H318 | |

See full text of H-phrases in section 16. Occupational exposure limits are listed in section 8, if these are available.

Other information
-

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

General information
In the case of accident: Contact a doctor or casualty department – take the label or this safety data sheet. Contact a doctor if in doubt about the injured person's condition or if the symptoms persist. Never give an

unconscious person water or other drink.

Inhalation

Upon breathing difficulties or irritation of the respiratory tract: Bring the person into fresh air and stay with him/her.

Skin contact

IF ON SKIN: Wash with plenty of water and soap.
Remove contaminated clothing and shoes. Ensure to wash exposed skin thoroughly with water and soap. DO NOT use solvents or thinners.
If skin irritation occurs: Get medical advice/attention.

Eye contact

If in eyes: Flush eyes immediately with plenty of water or isotonic water (20-30 °C) for at least 5 minutes and continue until irritation stops. Remove contact lenses. Make sure to flush under upper and lower eyelids. If irritation continues, contact a doctor. Continue flushing during transport.

Ingestion

If the person is conscious, rinse the mouth with water and stay with the person. Never give the person anything to drink.
In case of malaise, seek medical advice immediately and bring the safety data sheet or label from the product. Do not induce vomiting, unless recommended by the doctor. Have the person lean forward with head down to avoid inhalation of or choking on vomited material.

Burns

Not applicable.

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

Irritation effects: This product contains substances, which may cause irritation upon exposure to skin, eyes or lungs.
Exposure may result in an increased absorption potential of other hazardous substances at the area of exposure.

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

If eye irritation persists: Get medical advice/attention.

### Information to medics

Bring this safety data sheet or the label from this product.

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

Suitable extinguishing media: Alcohol-resistant foam, carbon dioxide, powder, water mist.
Unsuitable extinguishing media: Waterjets should not be used, since they can spread the fire.

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

Fire will result in dense smoke. Exposure to combustion products may harm your health. Closed containers, which are exposed to fire, should be cooled with water. Do not allow fire-extinguishing water to enter the sewage system and nearby surface waters.
If the product is exposed to high temperatures, e.g. in the event of fire, dangerous decomposition compounds are produced. These are:
Carbon oxides (CO / CO2)

### 5.3. ▼Advice for firefighters

Wear self-contained breathing apparatus and protective clothing to prevent contact. Upon direct exposure contact The National Poisons Information Service (dial 112, 24 h service) in order to obtain further advice.

## SECTION 6: Accidental release measures

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

Avoid direct contact with spilled substances.
Contaminated areas may be slippery.

### 6.2. Environmental precautions

Avoid discharge to lakes, streams, sewers, etc.
Keep unauthorized persons away from the spill

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

Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations.
Wherever possible cleaning should be performed with normal cleaning agents. Avoid use of solvents.

### 6.4. Reference to other sections

See section 13 “Disposal considerations” on handling of waste.
See section 8 "Exposure controls/personal protection" for protective measures.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

Smoking, drinking and consumption of food is not allowed in the work area.
See section 8 "Exposure controls/personal protection" for information on personal protection.

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

Containers that have been opened must be carefully resealed and kept upright to prevent leakage.

#### Recommended storage material

Always store in containers of the same material as the original container.

#### Storage conditions

> 0°C

#### Incompatible materials

Strong acids, strong bases, strong oxidizing agents, and strong reducing agents.

### 7.3. Specific end use(s)

This product should only be used for applications quoted in section 1.2.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

No substances are listed in the national list of substances with an occupational exposure limit.

#### DNEL

Lactic acid

| Duration: | Route of exposure: | DNEL: |
|---|---|---|
| | Inhalation | 296 mg/m³ |
| Short term | Inhalation | 592 mg/m³ |
| | Oral | 35.4 mg/kg |

#### PNEC

Lactic acid

| Route of exposure: | Duration of Exposure: | PNEC: |
|---|---|---|
| Freshwater | | 1.3 mg/L |
| Sewage treatment plant | | 10 mg/L |

### 8.2. ▼Exposure controls

Apply general control to prevent unnecessary exposure

#### General recommendations

Smoking, drinking and consumption of food is not allowed in the work area.

#### Exposure scenarios

There are no exposure scenarios implemented for this product.

#### Exposure limits

Occupational exposure limits have not been defined for the substances in this product.

#### Appropriate technical measures

Apply standard precautions during use of the product. Avoid inhalation of vapours.

#### Hygiene measures

Take off contaminated clothing and wash it before reuse.

#### Measures to avoid environmental exposure

No specific requirements.

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

##### Generally

Use only CE marked protective equipment.

##### Respiratory Equipment

| Work situation | Type | Class | Colour | Standards | |
|---|---|---|---|---|---|
| When there is risk of formation of mist/aerosol | Respiratory protection suitable for the purpose must be used. | | | EN 14387 |  |

### Skin protection

| Recommended | Type/Category | Standards | |
|---|---|---|---|
| Wear appropriate protection clothing, e.g. coveralls in polypropylene or working clothes in cotton or polyester. | - | - |  |

### Hand protection

| Material | Glove thickness (mm) | Breakthrough time (min.) | Standards | |
|---|---|---|---|---|
| Nitrile | 0,3 | > 480 | EN374 |  |

### Eye protection

| Type | Standards | |
|---|---|---|
| Face shield alternatively safety glasses with side shields. | EN166 |  |

## SECTION 9: Physical and chemical properties

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

**Physical state**
Liquid

**Colour**
Yellowish

**Odour / Odour threshold**
Faint

**pH**
3-6

**Density (g/cm$^3$)**
1-1.1

**Kinematic viscosity**
50-40000 mPa.s

**Particle characteristics**
Does not apply to liquids.

**Phase changes**

**Melting point/Freezing point (°C)**
~0

**Softening point/range (°C)**
Does not apply to liquids.

**Boiling point (°C)**
~ 100

**▼Vapour pressure**
No data available.

**▼Relative vapour density**
No data available.

**▼Decomposition temperature (°C)**

No data available.

Data on fire and explosion hazards

▼Flash point (°C)
No data available.

▼Flammability (°C)
No data available.

▼Auto-ignition temperature (°C)
No data available.

▼Lower and upper explosion limit (% v/v)
No data available.

Solubility

▼Solubility in water
No data available.

▼n-octanol/water coefficient (LogKow)
No data available.

▼Solubility in fat (g/L)
No data available.

9.2. Other information

Other physical and chemical parameters
No data available.

▼Oxidizing properties
No data available.

## SECTION 10: Stability and reactivity

10.1. Reactivity
No data available.

10.2. Chemical stability
The product is stable under the conditions, noted in section 7 “Handling and storage”.

10.3. Possibility of hazardous reactions
None known.

10.4. Conditions to avoid
None known.

10.5. Incompatible materials
Strong acids, strong bases, strong oxidizing agents, and strong reducing agents.

10.6. ▼Hazardous decomposition products
Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity

| | |
|---|---|
| Product/substance | Lactic acid |
| Species: | Rat |
| Route of exposure: | Oral |
| Test: | LD50 |
| Result: | 3543 mg/kg |

| | |
|---|---|
| Product/substance | Lactic acid |
| Species: | Mouse |
| Route of exposure: | Oral |
| Test: | LD50 |
| Result: | 4875 mg/kg |

| | |
|---|---|
| Product/substance | Lactic acid |
| Species: | Rabbit |
| Route of exposure: | Dermal |

| | |
|---|---|
| Test: | LD50 |
| Result: | 2000 mg/kg |

| | |
|---|---|
| Product/substance | Lactic acid |
| Species: | Rat |
| Route of exposure: | Inhalation |
| Test: | LC50 |
| Result: | >7.94 mg/L |

### Skin corrosion/irritation
Causes skin irritation.

### Serious eye damage/irritation
Causes serious eye irritation.

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

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

### Germ cell mutagenicity
Based on available data, the classification criteria are not met.

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

### Reproductive toxicity
Based on available data, the classification criteria are not met.

### STOT-single exposure
Based on available data, the classification criteria are not met.

### STOT-repeated exposure
Based on available data, the classification criteria are not met.

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

### 11.2. Information on other hazards

### Long term effects
Irritation effects: This product contains substances, which may cause irritation upon exposure to skin, eyes or lungs. Exposure may result in an increased absorption potential of other hazardous substances at the area of exposure.

### ▼Endocrine disrupting properties
This mixture/product does not contain any substances known to have hormone-disrupting properties in relation to health.

### Other information
None known.

## SECTION 12: Ecological information

### 12.1. Toxicity

| | |
|---|---|
| Product/substance | Lactic acid |
| Species: | Fish, Lepomis macrochirus |
| Duration: | 96 hours |
| Test: | LC50 |
| Result: | 130 mg/L |

| | |
|---|---|
| Product/substance | Lactic acid |
| Species: | Fish, Oncorhynchus mykiss |
| Duration: | 96 hours |
| Test: | LC50 |
| Result: | 130 mg/L |

| | |
|---|---|
| Product/substance | Lactic acid |
| Species: | Daphnia magna |
| Duration: | 48 hours |
| Test: | EC50 |
| Result: | 130 mg/L |

| | |
|---|---|
| Product/substance | Lactic acid |
| Species: | Pseudokirchneriella subcapitata |
| Duration: | 72 hours |
| Test: | EC50 |
| Result: | >2800 mg/L |

| | |
|---|---|
| Product/substance | Lactic acid |
| Species: | Selenastrum capricornutum |
| Duration: | 72 hours |
| Test: | EC50 |
| Result: | 3500 mg/L |

| | |
|---|---|
| Product/substance | Lactic acid |
| Species: | Pseudokirchneriella subcapitata |
| Test: | NOEC |
| Result: | 1900 mg/L |

| | |
|---|---|
| Product/substance | Lactic acid |
| Species: | Bacteria |
| Duration: | 3 hours |
| Test: | EC50 |
| Result: | >100 mg/L |

| | |
|---|---|
| Product/substance | Lactic acid |
| Duration: | 14 days |
| Test: | LC50 |
| Result: | >2250 mg/kg |

### 12.2. ▼Persistence and degradability

| | |
|---|---|
| Product/substance | Lactic acid |
| Result: | 64% |
| Conclusion: | Readily biodegradable |
| Test: | OECD 301 D |

### 12.3. ▼Bioaccumulative potential

| | |
|---|---|
| Product/substance | Lactic acid |
| LogKow: | -0.72 |
| Conclusion: | No potential for bioaccumulation |

### 12.4. ▼Mobility in soil

Dilutable in water.

### 12.5. Results of PBT and vPvB assessment

This mixture/product does not contain any substances known to fulfil the criteria for PBT and vPvB classification.

### 12.6. ▼Endocrine disrupting properties

This mixture/product does not contain any substances considered to have endocrine-disrupting properties in relation to the environment.

### 12.7. Other adverse effects

None known.

## SECTION 13: Disposal considerations

### 13.1. ▼Waste treatment methods

Product is not covered by regulations on dangerous waste.
Waste regulation (SFS 2020:614).

#### EWC code

| | |
|---|---|
| 03 03 99 | Wastes not otherwise specified |

#### Contaminated packing

Packaging containing residues of the product must be disposed of similarly to the product.

## SECTION 14: Transport information

| | 14.1 UN / ID | 14.2 UN proper shipping name | 14.3 Hazard class(es) | 14.4 PG* | 14.5 Env** | Other information: |
|---|---|---|---|---|---|---|
| ADR | - | - | - | - | - | - |
| IMDG | - | - | - | - | - | - |
| IATA | - | - | - | - | - | - |

* Packing group

** Environmental hazards

### Additional information

Not dangerous goods according to ADR, IATA and IMDG.

### 14.6. Special precautions for user

Not applicable.

### 14.7. Maritime transport in bulk according to IMO instruments

No data available.

## SECTION 15: Regulatory information

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

#### Restrictions for application

Restricted to professional users.

#### Demands for specific education

No specific requirements.

#### SEVESO - Categories / dangerous substances

Not applicable.

#### Additional information

Not applicable.

#### ▼Sources

Waste regulation (SFS 2020:614).
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 (CLP).
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).

### 15.2. Chemical safety assessment

No

## SECTION 16: Other information

### Full text of H-phrases as mentioned in section 3

EUH071, Corrosive to the respiratory tract.
H314, Causes severe skin burns and eye damage.
H318, Causes serious eye damage.

### ▼Abbreviations and acronyms

ADN = European Provisions concerning the International Carriage of Dangerous Goods by Inland Waterway
ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE = Acute Toxicity Estimate
BCF = Bioconcentration Factor
CAS = Chemical Abstracts Service
CE = Conformité Européenne (European conformity)
CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]
CSA = Chemical Safety Assessment

CSR = Chemical Safety Report
DMEL = Derived Minimal Effect Level
DNEL = Derived No Effect Level
EINECS = European Inventory of Existing Commercial chemical Substances
ES = Exposure Scenario
EUH statement = CLP-specific Hazard statement
EuPCS = European Product Categorisation System
EWC = European Waste Catalogue
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
GWP = Global warming potential
IARC = International Agency for Research on Cancer (IARC)
IATA = International Air Transport Association
IBC = Intermediate Bulk Container
IMDG = International Maritime Dangerous Goods
LogPow = logarithm of the octanol/water partition coefficient
MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
OECD = Organisation for Economic Co-operation and Development
PBT = Persistent, Bioaccumulative and Toxic
PNEC = Predicted No Effect Concentration
RID = The Regulations concerning the International Carriage of Dangerous Goods by Rail
RRN = REACH Registration Number
SCL = A specific concentration limit
SVHC = Substances of Very High Concern
STOT-RE = Specific Target Organ Toxicity - Repeated Exposure
STOT-SE = Specific Target Organ Toxicity - Single Exposure
TWA = Time weighted average
UN = United Nations
UVBC = Unknown or variable composition, complex reaction products or of biological materials
VOC = Volatile Organic Compound
vPvB = Very Persistent and Very Bioaccumulative

### Additional information

The classification of the mixture in regard of health hazards is in accordance with the calculation methods given by Regulation (EC) No. 1272/2008 (CLP).

### The safety data sheet is validated by

OrganoClick AB

### ▼Other

A change (in proportion to the last essential change (first cipher in SDS version, see section 1)) is marked with a triangle.
The information in this safety data sheet applies only to this specific product (mentioned in section 1) and is not necessarily correct for use with other chemicals/products.
It is recommended to hand over this safety data sheet to the actual user of the product. Information in this safety data sheet cannot be used as a product specification.
Country-language: SE-en