

SiloSolve® FC EKO

Product Information

Version: 1 PI GLOB EN 04-26-2017

Description

SiloSolve® FC EKO is a technological additive containing live microorganisms to be used as a silage additive.

Material No:	717208	Storage temp:	20 °C / 68 °F
Size	10x100 g	Type	Alu pouch in box
Conditions:	Cool Dry	Shelf life	12 months

Cell Count

Total label guarantee (CFU/g): 1.3E+11

Ingredients

Bacteria: Lactococcus lactis (DSM11037/1k2081), Lactobacillus buchneri (DSM22501/1k20738).

Ingredients: maltodextrin.

Application

Dissolve the sachet with bacteria into appropriate amount of water. Bacteria dissolved in water must be used within 72 hours, but preferably within 24 hours.

Tons Treated

The contents of one sachet treats 50 tons of forage.

Handling

All microbial silage inoculants are non-hazardous in relation to the legislation on dangerous substances.

Shelf life of bacteria in original and unbroken package from the date of manufacture is: 3 months at 20°C, 12 months at 5°C and 24 months at -18°C.

Legislation

The ingredients contained in this formulation are all approved by the EU Commission as well as the European Food Safety Authority. Silage treated with this product may be fed to all species or categories of animals.

Can be applied in organic agriculture in agreement with Council Regulation (EC) No. 834/2007 and Commission Regulation (EC) No.889/2008. Evaluation of the product has been performed by Kiwa Sweden AB and/or Biokont CZ, s.r.o.

Specifications

Physical Properties

Color:	Off-white	Form:	Powder
Solubility:	Water soluble		

Additional Information

Our production is FAMI-QS certified.

SiloSolve® FC EKO

Product Information

Version: 1 PI GLOB EN 04-26-2017

GMO Information

In accordance with the legislation in the European Union* SiloSolve® FC EKO does not contain GMOs and does not contain GM labeled raw materials**. In accordance with European legislation on labeling of final food products** we can inform that the use of SiloSolve® FC EKO does not trigger a GM labeling of the final food product. Chr. Hansen's position on GMO can be found on: www.chr-hansen.com/About us/Policies and positions/Quality and product safety.

** Directive 2001/18/EC of the European Parliament and of the Council of 12 March 2001 on the deliberate release into the environment of genetically modified organisms with later amendments, and repealing Council Directive 90/220/EEC.*

*** Regulation (EC) No 1829/2003 of the European Parliament and of the Council of 22 September 2003 on genetically modified food and feed with later amendments.*

Regulation (EC) No 1830/2003 of the European Parliament and of the Council of 22 September 2003 concerning the traceability and labeling of genetically modified organisms and the traceability of food and feed products produced from genetically modified organisms amending Directive 2001/18/EC, and with later amendments.

SAFETY DATA SHEET

SiloSolve® FC EKO

Version: 2 EU / EN

Revision Date: 25-04-2017

SECTION 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier

Product name: SiloSolve® FC EKO
Material No.: 717208

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

Application: Silage inoculant.

1.3 Details of the supplier of the safety data sheet

Supplier: Headquarters
Chr. Hansen A/S
Bøge Allé 10-12
DK-2970 Hørsholm
Tel. +45 45 74 74 74

SDS@chr-hansen.com

1.4 Emergency telephone number

Emergency telephone: +45 45 74 74 74

SECTION 2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

The product is not classified.

2.2 Label elements

Signal Word None.

Hazard statements None.

Precautionary statements None.

Supplemental hazard information

None

2.3 Other hazards

SAFETY DATA SHEET

SiloSolve® FC EKO

Version: 2 EU / EN

Revision Date: 25-04-2017

Physical and Chemical Hazards: Small quantities: The hazardous properties of the product are considered to be limited.

Large quantities: In high concentrations, fine particles may form explosive dust/air mixtures.

Human health: Dust may irritate the eyes and the respiratory system. Frequent inhalation of dust over a long period of time increases the risk of developing lung diseases.

Environment: The harmful effects of the product in the environment are considered to be limited.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

3.2 Mixtures

The product contains: bacteria.

Does not contain substances that must be indicated according to current regulations.

SECTION 4. FIRST-AID MEASURES

4.1 Description of first aid measures

Inhalation: Dust inhalation: Move into fresh air and keep at rest. In case of persistent throat irritation or coughing: Seek medical attention and take along these instructions.

Skin contact: Remove contaminated clothing immediately and wash skin with soap and water.

Eye contact: Do not rub eye. Immediately flush with plenty of water for up to 15 minutes. Remove any contact lenses and open eyelids widely. If irritation persists: Seek medical attention and bring along these instructions.

Ingestion: Rinse mouth thoroughly. If uncomfortable: Get medical attention.

4.2 Most important symptoms and effects, both acute and delayed

Dust may irritate the eyes and the respiratory system. Frequent inhalation of dust over a long period of time increases the risk of developing lung diseases.

4.3 Indication of any immediate medical attention and special treatment needed

Symptomatic treatment.

SECTION 5. FIRE-FIGHTING MEASURES

5.1 Extinguishing media

Use fire-extinguishing media appropriate for surrounding materials.

5.2 Special hazards arising from the substance or mixture

Potential dust explosion hazard. Fine dust dispersed in air in sufficient concentrations and in the presence of an ignition source is a potential dust explosion hazard.

5.3 Advice for firefighters

Selection of respiratory protection for fire fighting: follow the general fire precautions indicated in the workplace.

SECTION 6. ACCIDENTAL RELEASE MEASURES

SAFETY DATA SHEET

SiloSolve® FC EKO

Version: 2 EU / EN

Revision Date: 25-04-2017

- 6.1 Personal precautions, protective equipment and emergency procedures
Avoid generation and spreading of dust. Avoid inhalation of dust and contact with skin and eyes. Follow precautions for safe handling described in this safety data sheet.
- 6.2 Environmental precautions
Avoid discharge into drains, water courses or onto the ground.
- 6.3 Methods and material for containment and cleaning up
Use a vacuum cleaner. If not possible, moisten dust with water before it is collected with shovel, broom or the like. Dust Deposits should not be allowed to accumulate on surfaces, as these may form an explosive mixture if they are released into the atmosphere in sufficient concentration. Avoid dispersal of dust in the air.
- 6.4 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
Safe handling advice: Avoid inhalation of dust and contact with skin and eyes. Observe good industrial hygiene practices.
Technical measures: Keep the workplace clean. Avoid generation, spreading and accumulation of dust.
Large quantities: Ensure appropriate exhaust and ventilation at machinery and at places where dust can be generated. Take precautionary measures against static discharges when there is a risk of dust explosion.
Technical precautions: Local exhaust is recommended.
- 7.2 Conditions for safe storage, including any incompatibilities
Store in tightly closed original container. Store at ambient temperature conditions. For detailed information consult the PI sheet.
Technical measures for safe storage: Risk of dust explosion: Comply with the regulations on protection against dust explosions.
- 7.3 Specific end use(s)
No information available.
-

SAFETY DATA SHEET

SiloSolve® FC EKO

Version: 2 EU / EN

Revision Date: 25-04-2017

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Exposure limits are listed below. No data - no exposure limits noted for ingredient(s).

Occupational exposure limits: Dust inhalable: 10 mg/m³. Dust respirable: 4 mg/m³.

8.2 Exposure controls

Engineering measures: Provide adequate ventilation. Use work methods which minimise dust production. The risk of inhalation of dust must be minimised as much as possible.

Personal protection: Personal protection equipment should be chosen according to the CEN standards and in discussion with the supplier of the personal protective equipment

Respiratory equipment: In case of inadequate ventilation: Use respiratory equipment with particle filter:

EU: FFP3 filter [e.g. 3M 8835 mask]

US: P100 filter [e.g. 3M 8293 mask]

For daily use of more than 3 hours a respirator with a powered air blower should be used.

Hand protection: Gloves are recommended for prolonged use.

Eye protection: Use tight fitting goggles if dust is generated.

Skin protection: No special precautions.

Hygiene measures: Wash hands after contact.

Environmental Exposure Controls: None.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance:	Powder
Color:	Off-white
Odour:	Faint odor
pH:	Not relevant
Melting point:	Not relevant
Boiling point:	Not relevant
Decomposition temperature:	Not relevant
Flash point:	Not relevant
Relative density:	Not available
Solubility:	Water soluble

9.2 Other information

No information available.

SECTION 10. STABILITY AND REACTIVITY

10.1 Reactivity

None known.

10.2 Chemical stability

Stable under normal temperature conditions and recommended use.

SAFETY DATA SHEET

SiloSolve® FC EKO

Version: 2 EU / EN

Revision Date: 25-04-2017

10.3 Possibility of hazardous reactions

None known.

10.4 Conditions to avoid

None known.

10.5 Incompatible materials

None known.

10.6 Hazardous decomposition products

None known.

SECTION 11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Inhalation: Dust may irritate respiratory system. Inhalation of high concentrations of dust or aerosols may cause toxic alveolitis. Symptoms like fever, coldshivering, coughing, difficulties in breathing, headache, muscle and joint pains etc. may appear 6 to 8 hours after exposure. The symptoms normally disappear completely over night without any treatment.

Skin contact: Dust has an irritating effect on moist skin.

Eye contact: Dust in the eyes will cause irritation.

Ingestion: May irritate and cause malaise.

Specific effects: Frequent inhalation of dust over a long period of time increases the risk of developing lung diseases.

SECTION 12. ECOLOGICAL INFORMATION

12.1 Toxicity

The harmful effects of the product in the environment are considered to be limited.

12.2 Persistence and degradability

The product is expected to be biodegradable.

12.3 Bioaccumulative potential

Bioaccumulation: Is not expected to be bioaccumulable.

12.4 Mobility in soil

The product is water soluble and may spread in water systems.

12.5 Results of PBT and vPvB assessment

No information required.

12.6 Other adverse effects

None known.

SAFETY DATA SHEET

SiloSolve® FC EKO

Version: 2 EU / EN

Revision Date: 25-04-2017

SECTION 13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Dispose of waste and residues in accordance with local authority requirements.

EWC-code: 02 01 99

SECTION 14. TRANSPORT INFORMATION

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

14.1 UN number -

Air (ICAO/IATA):

14.3 Transport hazard class(es) -

14.4 Packing group -

Sea (IMDG):

14.3 Transport hazard class(es) -

14.4 Packing group -

EmS -

MFAG -

Land (RID/ADR):

14.3 Transport hazard class(es) -

14.4 Packing group -

14.5 Environmental hazards

Marine pollutant (IMDG): -

14.6 Special precautions for user

None known.

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

Not relevant.

SECTION 15. REGULATORY INFORMATION

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

The labeling requirements laid down in the Regulation 1831/2003/EC must be followed.

National regulation:

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, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006 with amendments.

Regulation (EC) No 1907/2006 of the European parliament and of the council of 18 December 2006 with amendments. Commission Decision 2000/532/EC as amended by Decision 2001/118/EC establishing a list of wastes and hazardous waste pursuant to Council Directive 75/442/EEC on waste and Directive 91/689/EEC on hazardous waste with amendments.

15.2 Chemical safety assessment:

Not required.

SECTION 16. OTHER INFORMATION

SAFETY DATA SHEET

SiloSolve® FC EKO

Version: 2 EU / EN

Revision Date: 25-04-2017

The user must be instructed in the proper work procedure and be familiar with the contents of these instructions.

Wording of Hazard Statements

-

The information in this Safety Data Sheet has been obtained from current and reliable sources. However, the data is provided without warranty, express or implied, regarding its correctness or accuracy. It is the user's responsibility to determine safe conditions for use of this product and to assume liability for loss injury, damage, or expense resulting from improper use of this product.