

**SAFETY DATA SHEET****KOFASIL LIFE****ADDCON**

The product contains lacto bacteria

**1. Identification of the substance / preparation and company / undertaking**

<b>Product name</b>	KOFASIL LIFE M		
<b>Chemical product name</b>	Preparation of grow materials and heterofermentative lacto bacteria		
<b>Synonyms</b>	Lactobacillus plantarum DSM 3676 [1k20731]; Lactobacillus plantarum DSM 3677 [1k20732]		
<b>Manufacturer/ supplier</b>	ADDCON EUROPE GmbH Kaiserstraße 1 D-53113 Bonn Germany	Phone: +49(0)228-919100 Fax: +49(0)228-91910-60	
<b>Emergency Telephone number</b>	+49 (0) 3493 737 90 (This number is serviced during office hours only. Mo – Fr; 8.00a.m.- 5.00 p.m.)		
<b>e-mail-address of person responsible for this SDS</b>	<a href="mailto:thomas.ohlmann@addcon.com">thomas.ohlmann@addcon.com</a>		
<b>Recommended use</b>	Silage additive		

**2. Hazards identification**

The preparation is not classified as dangerous according to directive 67/548/EEC and its amendments.

<b>Classification</b>	Not classified
<b>Human health hazards</b>	Based on the available data of this product no hazardous properties are known. Part of the normal flora in man, animal.
<b>Environmental hazards</b>	Based on the available data of this product no hazardous properties are known. Part of the normal flora in environment, worldwide.
<b>Physical / chemical hazards</b>	Based on the available data of this product no hazardous properties are known.

**3. Composition / information on ingredients**

Substance / preparation : preparation

Chemical name	CAS no.	%	EC- no. *	classification
Lactobacillus plantarum DSM 3676/3677 See section 16 for the full text of the R-phrases declared above.	-	≈ 1	-	Not classified
Grow materials See section 16 for the full text of the R-phrases declared above.	-	> 90	-	Not classified

\* EC-No. means EINECS- or ELINCS-number.

**4. First-aid measures****Effects and symptoms**

<b>Inhalation</b>	Over-exposure by inhalation may cause respiratory irritation (coughing).
<b>Ingestion</b>	There is no known acute effect after over-exposure to this product.
<b>Skin contact</b>	There is no known acute effect after over-exposure to this product.
<b>Eye contact</b>	Over-exposure can cause eye irritation.
<b>First-aid measures</b>	
<b>General</b>	Move exposed person to fresh air.
<b>Inhalation</b>	If inhaled, remove to fresh air. Obtain medical attention if symptoms occur.
<b>Ingestion</b>	If swallowed, rinsed mouth with water (only if the person is conscious). Obtain medical attention if symptoms occur.
<b>Skin contact</b>	Rinse with plenty of running water. Remove contaminated clothes and shoes. Obtain medical attention if symptoms occur.
<b>Eye contact</b>	Rinse with plenty of running water. Obtain medical attention if symptoms occur.
<b>First-aid facilities:</b>	Wash area in contact with warm water and soap (omit soap for mucous membrane exposure); drug therapy (penicillin and aminoglycosides).

**5. Fire-fighting measures****Extinguishing media**

<b>Small fire suitable</b>	Use dry chemical or CO <sub>2</sub> .
<b>Large fire suitable</b>	Use water, foam or dry chemical powder-
<b>Unusual fire / explosion hazards</b>	Do not inhale explosion and combustion gases.

## 5. Fire-fighting measures

<b>Hazardous thermal decomposition products</b>	In case of fire, may produce hazardous decomposition products such as carbon monoxide, carbon dioxide.
<b>Special fire-fighting procedures</b>	No special measures required.
<b>Protection of fire-fighters</b>	Wear suitable protective clothing. Self-contained breathing apparatus.

## 6. Accidental release measures

<b>Personal precautions</b>	No special design features beyond those suitable for a well designed and functional laboratory with good microbiology practices.
<b>Environmental precautions</b>	Do not allow to enter drains/surface water/ground-water.
<b>Clean-up methods</b>	
<b>Small spill and leak</b>	Take up mechanically, placing in appropriate containers for disposal. Susceptible to many disinfectants – 1% sodium hypochlorite and 70% alcohol, a. o.
<b>Large spill and leak</b>	Take up mechanically. Avoid generation of dust. Treat the recovered material as prescribed in the section on waste disposal.

**Note: See section 8 for personal protective equipment and section 13 for waste disposal.**

## 7. Handling and storage

<b>Handling</b>	Allow aerosols to settle; wearing protective clothing. Decontaminate before disposal; steam sterilization, chemical disinfection.
<b>Storage</b>	Store in a dry, cool (4°C) and dark area (store in the frost (-20°C) increase the shelf-life). The product has been produced and packaging in accordance with strict quality practices. Maintain this quality level by storing this product away from other chemicals.
<b>Remarks</b>	The product should be handled with the care usual when dealing with bacteria or probiotics.
<b>Packaging materials</b>	
<b>Suitable</b>	Aluminium bags or polyethylene bags

**Note: See section 10 for stability and reactivity.**

## 8. Exposure controls / personal protection

<b>Exposure limit values</b>	Does not contain substances above concentration limits fixing an occupational exposure limit.
<b>Engineering measures</b>	Use with adequate ventilation in closed rooms. See section 7. No additional measures necessary.
<b>Hygiene measures</b>	When using does not eat, drink or smoke. Wash and disinfect hands after handling compounds and before eating, smoking and using the lavatory at the end of the day.
<b>Personal protective equipment – Production scale</b>	
<b>Respiratory system</b>	In the case of dust formation use wear dust protection mask.
<b>Skin and body</b>	Working clothes
<b>Eyes</b>	eye protection: not required
<b>Hands</b>	Wear suitable gloves.
<b>Recommended material(s)</b>	> 8 hours (breakthrough time): Nitril rubber, butyl rubber, neoprene, Viton, PVC. Replace damaged gloves.

**Advice on personal protection is applicable for high exposure levels. Select proper personal protection based on a risk assessment of the actual situation.**

## 9. Physical and chemical properties

<b>Physical state</b>	Solid (granules or solid, hygroscopic)
<b>Colour</b>	White to white-yellow
<b>Odour</b>	Odourless
<b>pH</b>	6 - 7 (concentration 10%)
<b>Boiling point</b>	Not available.
<b>Melting point</b>	Not available.
<b>Flash point</b>	Not available.
<b>Lower explosion limit</b>	30 g/m <sup>3</sup>
<b>Upper explosion limit</b>	Not available.
<b>Auto-ignition temperature</b>	Not available.
<b>Density ( g/cm<sup>3</sup>)</b>	0,62 g/cm <sup>3</sup>

## 9. Physical and chemical properties

<b>Bulk density</b>	0,62 kg/m <sup>3</sup>
<b>Solubility in water</b>	soluble
<b>Solubility</b>	Easy soluble in the following materials: cold water. Partially soluble in the following materials: not available.
<b>Molecular weight</b>	Not available.
<b>Minimum ignition energy</b>	Not available.
<b>Dust explosion class</b>	Not available.
<b>Remarks</b>	More detailed information on the physical and chemical properties can be requested from the supplier.

## 10. Stability and reactivity

<b>Stability</b>	Stable under recommended storage and handling conditions (see section 7).
<b>Conditions to avoid</b>	No known significant effects or critical hazards.
<b>Materials to avoid</b>	No known significant effects or critical hazards.
<b>Hazardous decomposition products</b>	In case of fire: see section 5.

## 11. Toxicological information

### Potential acute health effects

<b>Inhalation</b>	Slightly hazardous in the case of contact of large amounts.
<b>Ingestion</b>	Slightly hazardous in the case of contact of large amounts.
<b>Skin contact</b>	Slightly hazardous in the case of contact of large amounts.
<b>Eye contact</b>	Slightly hazardous in the case of contact of large amounts.

**Acute toxicity** No known significant effects or critical hazards.

### Primary irritation

Product / ingredient name	Test	Species	Evaluation	Method
Lactobacillus (DSM 13573)	Skin	Rabbit	not irritant	EEC 84/449, B4
	Eye	Rabbit	not irritant	EEC 84/449, B5

**Sensitization** No sensitizing effect admits.

### Potential chronic health effects

<b>Chronic effects</b>	No known significant effects or critical hazards.
<b>Carcinogenicity / Mutagenicity / Teratogenicity / Developmental effects / Fertility effects</b>	No known significant effects or critical hazards.
<b>Chronic toxicity</b>	No specific data.

**Reproductive toxicity** No specific data.

**Remarks** This material may produce dust. It can cause respiratory tract irritation. Breathing small amounts of this material during usual industrial handling is not likely to be harmful. Breathing large amounts may be harmful. Swallowing this material is not likely to be harmful. The toxicological properties of this substance have not been fully investigated.

## 12. Ecological information

<b>Environmental effects</b>	This product shows a low bioaccumulation potential. Part of the normal flora in environment.
<b>Aquatic ecotoxicity</b>	No specific data.
<b>Persistence / degradability</b>	No specific data.
<b>Other adverse effects</b>	No known significant effects or critical hazards.
<b>AOX</b>	The product does not contain organically bound halogens which could lead to an AOX (Absorbable Organically bound Halogens) value in waste water.
<b>Mobility</b>	For data on physical state and solubility see section 9.

### 13. Disposal considerations

**Methods of disposal (waste of residues; contaminated packaging)** Decontaminate before disposal: steam sterilization (121° C for at least 15 min), dry heat (160 – 170° C for at least 1 hour) and chemical disinfection (1% sodium hypochlorite and 70% alcohol, a. o.) Waste must be disposed of in accordance with national and local environmental regulations. Controlled biodegradation in waste water treatment is possible.

### 14. Transport information

#### International transport regulations

Regulatory information	UN - Number	Proper shipping name	class	PG*	Label	Additional information
ADR/RID Class	Not regulated.	-	-	-	-	-
ADNR Class	Not regulated	-	-	-	-	-
IMDG Class	Not regulated	-	-	-	-	-
IATA Class	Not regulated	-	-	-	-	-

PG\* : Packing group

### 15. Regulatory information

#### EC-regulations

**Risk phrases** According to EU directives 67/548/EEC and 1999/45/EC this product does not require labelling.

**Remarks** In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

### 16. Other information

Full text of R phrases referred to in sections 2 and 3 – United Kingdom (UK)

Full text of classifications referred to in sections 2 and 3 – United Kingdom (UK)

**Information** Department QS, AS  
Tel.: +49 (0) 3493 737 90

**Internal code** SDB\_KL\_E\_0001

#### History

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#### Notice to reader

The information contained in the Safety Data Sheet is based on our data available on the date of publication. The information is intended to aid the user in controlling the handling risks; it is not to be construed as a warranty or specification of the product quality. The information may not be or may not altogether be applicable to combinations of the product with other substances or to particular applications.

The user is responsible for ensuring that appropriate precautions are taken and for satisfying them that the data are suitable and sufficient for the product's intended purpose. In case of any unclarity we advise consulting the supplier or an expert.

**Training advice** Handling of this substance or preparation is restricted to skilled personal only.

**Source of key data** Literature data and/or investigation reports are available through the manufacturer.

**Alterations compared to the previous version** Alterations compared to the previous version are marked with a little (blue) triangle.

