

Printing date 14.11.2019 Version number 2 Revision: 14.11.2019

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

1.1 Product identifier

Trade name: FKL Cereals

1.2 Relevant identified uses of the substance or mixture and uses advised against No further relevant information available.

Application of the substance / the mixture Adjuvant

1.3 Details of the supplier of the safety data sheet Supplier:

Cheminova Deutschland GmbH & Co. KG FMC Agricultural Solutions Stader Elbstraße 26 21683 Stade Germany

Tel: +49 (0) 4141 9204 0 Fax: +49 (0) 4141 9204 210 datenblatt@fmc.com www.fmcagro.de

Further information obtainable from:

Cheminova Deutschland GmbH & Co. KG FMC Agricultural Solutions Stader Elbstraße 26 21683 Stade Germany Tel: +49 (0) 4141 9204 0 Fax: +49 (0) 4141 9204 210

Fax: +49 (0) 4141 9204 210 datenblatt@fmc.com www.fmcagro.de

1.4 Emergency telephone number:

Cases of intoxication:

+49 (0) 551 19240 (GIZ-Nord Poisons Centre, Göttingen, Germany, 24 h) "Member of EPECS Network"

Hazardous substance/dangerous goods incidents (e.g. spills, leaks, fire, exposure or accident): 0800 181 7059 (CHEMTREC Deutschland, gebührenfrei, 24 h) +49 (0) 69 643 508 409 (CHEMTREC aus dem Ausland, 24 h)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture Classification according to Regulation (EC) No 1272/2008



Skin Sens. 1B H317 May cause an allergic skin reaction.

Aquatic Chronic 3 H412 Harmful to aquatic life with long lasting effects.

2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008

The product is classified and labelled according to the CLP regulation.

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Hazard pictograms



Signal word Warning

Hazard statements

H317 May cause an allergic skin reaction.

H412 Harmful to aquatic life with long lasting effects.

Precautionary statements

P261 Avoid breathing mist/vapours/spray.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P302+P352 IF ON SKIN: Wash with plenty of soap and water.

P333+P313 If skin irritation or rash occurs: Get medical advice/attention. P362+P364 Take off contaminated clothing and wash it before reuse.

P501 Dispose of contents/container to a suitable waste collection point.

Additional information:

EUH401 To avoid risks to human health and the environment, comply with the instructions for use.

2.3 Other hazards

Results of PBT and vPvB assessment

PBT: Not applicable. **vPvB:** Not applicable.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Description: Mixture of substances listed below with nonhazardous additions.

Dangerous components:		
CAS: 68131-39-5 NLP: 500-195-7	Alcohols C12-15 ethoxylated Eye Dam. 1, H318;	< 20%
CAS: 111-46-6 EINECS: 203-872-2 Index number: 603-140-00-6 Reg.nr.: 01-2119457857-21	2,2'-oxybisethanol STOT RE 2, H373;	< 5%
CAS: 71-36-3 EINECS: 200-751-6 Index number: 603-004-00-6	butan-1-ol ♦ Flam. Liq. 3, H226; ♦ Eye Dam. 1, H318; ♦ Acute Tox. 4, H302; Skin Irrit. 2, H315; STOT SE 3, H335-H336	< 5%

Additional information: For the wording of the listed hazard phrases refer to section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General information: Immediately remove any clothing soiled by the product.

After inhalation: Supply fresh air; consult doctor in case of complaints.

After skin contact:

Immediately wash with water and soap and rinse thoroughly.

If skin irritation continues, consult a doctor.

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After eye contact:

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor. If contact lenses are worn, remove after 5 minutes of rinsing, then continue rinsing.

After swallowing:

Rinse mouth with plenty of water; do not swallow.

Do not induce vomiting; call for medical help immidiately and show this material safety data sheet.

4.2 Most important symptoms and effects, both acute and delayed

There may be irritaition and redness by eye or skin contact.

Nausea and stomach pain may occur.

After inhalation there may be irritation of the throat with a feeling of tightness in the chest.

Immediate effects can be expected after short-term exposure.

4.3 Indication of any immediate medical attention and special treatment needed

Symptomatic treatment (decontamination, vital functions), no specific antidote known.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing agents:

Foam

Use carbon dioxide (CO₂) or dry chemical powder for small fires.

For safety reasons unsuitable extinguishing agents: Water with full jet

5.2 Special hazards arising from the substance or mixture

In case of fire, the following can be released:

Carbon monoxide (CO)

Carbon dioxide (CO₂)

Under certain fire conditions, traces of other toxic gases cannot be excluded.

5.3 Advice for firefighters

Protective equipment:

Wear self-contained respiratory protective device.

Wear fully protective suit.

Additional information

Do not inhale explosion gases or combustion gases.

Cool endangered receptacles with water spray.

Use water spray to knock down fire fumes if possible.

Collect contaminated fire fighting water separately. It must not enter the sewage system.

Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Wear protective equipment. Keep unprotected persons away.

Ensure adequate ventilation

Avoid contact with spilled product or contaminated areas.

6.2 Environmental precautions:

Do not allow product to reach sewage system or any water course.

6.3 Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust). Disposal had to be accomplished in suitable receptacles.

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If possible clean area with detergent and much water. Absorb wash liquid with absorbent and transfer to suitable containers for disposal.

6.4 Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Ensure good ventilation/exhaustion at the workplace.

Wear personal protection equipment.

Avoid contact with the eyes, the skin and clothing.

Do not breath in vapours/aerosols.

Wash hands before breaks and at the end of work.

Do not eat, drink or smoke in work areas.

Remove contaminated clothing and protective equipment before entering eating areas.

Wash contaminated clothing before reuse.

Information about fire - and explosion protection:



Keep ignition sources away - Do not smoke.

7.2 Conditions for safe storage, including any incompatibilities

Storage:

Requirements to be met by storerooms and receptacles:

Store only in the original receptacle.

Keep containers tightly closed in a dry, cool and well-ventilated place.

Information about storage in one common storage facility:

Do not store together with foodstuffs, beverages and feed.

Do not store with strong oxidising agents.

Addationally the restriction for joint storage must be observed (according to TRGS 510).

Further information about storage conditions:

Protect from heat and direct sunlight.

Protect from frost.

Keep out of reach for children.

Recommended storage temperature: Store between 5 °C and 35 °C.

Storage class: 10 (TRGS 510): Combustible liquids

7.3 Specific end use(s)

Use only in accordance with the instruction manual.

No further relevant information available.

SECTION 8: Exposure controls/personal protection

Additional information about design of technical facilities: No further data; see item 7.

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8.1 Control parameters

Ingredients with limit values that require monitoring at the workplace:

111-46-6 2,2'-oxybisethanol

WEL Long-term value: 101 mg/m³, 23 ppm

71-36-3 butan-1-ol

WEL Short-term value: 154 mg/m³, 50 ppm

Sk

Additional information: The lists valid during the making were used as basis.

8.2 Exposure controls

Personal protective equipment:

General protective and hygienic measures:

The usual precautionary measures are to be adhered to when handling chemicals.

Ensure good ventilation at the workplace.

Do not inhale gases / fumes / aerosols.

Be sure to clean skin thoroughly after work and before breaks.

The statements on personal protective equipment in the instructions for use apply when handling the product.

Respiratory protection:

Not necessary if room is well-ventilated.

Otherwise



Respiratory single serving mask DIN EN 149 with filter FFP2

Protection of hands:

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.



Protective gloves (EN 374, EN 388, EN 420)

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

Preventive skin protection by use of skin-protecting agents is recommended.

After use of gloves apply skin-cleaning agents and skin cosmetics.

Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

Choose chemical resistant gloves.

PVA gloves

PVC gloves

Butvl rubber

Nitrile Rubber

Penetration time of glove material

The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.

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Eye protection:



Tightly sealed goggles (EN 166)

Body protection:



Use suitable protective work clothing. Protective suit against pesticides (DIN 32781) is recommended when handling the product.



Sturdy shoes, e.g. rubber boots (EN 20345)

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

General Information

Appearance:

Form: Fluid
Colour: Light yellow
Odour: Characteristic

pH-value: 5.0 - 7.0

Change in condition

Melting point/freezing point: 4.5 °C Initial boiling point and boiling range: 96.5 - 349 °C

Flash point: 72 °C (closed cup)

Explosive properties: Not determined.

Explosion limits:

Oxidising properties No oxidising properties

Density:

Relative density 0.89 - 0.90

Solubility in / Miscibility with

water: 6.42 g/l at 20°C

Partition coefficient: n-octanol/water: log Pow = 5.3

9.2 Other information No further relevant information available.

SECTION 10: Stability and reactivity

10.1 Reactivity Stable under normal conditions of use.

10.2 Chemical stability

Thermal decomposition / conditions to be avoided:

No decomposition if used and stored according to specifications.

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10.3 Possibility of hazardous reactions

No hazardous reactions if used and stored according to specifications.

10.4 Conditions to avoid

Protect against heat and direct sunlight.

Protect from frost.

10.5 Incompatible materials: Strong acids. Strong bases. Strong oxidizing agents.

10.6 Hazardous decomposition products:

No hazardous decomposition products if stored and used according to specifications. See Section 5 for information about hazardous decomposition products in case of fire.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

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

LD/LC50 values relevant for classification:

Oral LD50 > 5000 mg/kg (rat)
Dermal LD50 > 2000 mg/kg (rat)

Primary irritant effect:

Skin corrosion/irritation Slight irritation and redness possible (without labelling).

Serious eye damage/irritation

Based on available data, the classification criteria are not met (Basis: Study results).

Respiratory or skin sensitisation

May cause an allergic skin reaction.

CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)

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.

SECTION 12: Ecological information

12.1 Toxicity

Aquatic toxicity:

The toxicity of this product was not tested. The aquatic toxicity of the product was evaluated based on the toxicity of the ingredients.

12.2 Persistence and degradability

Estimated half-life at 25°C: 1 year at pH 4; > 1 year at pH 7; zwischen 1 day and 1 year at pH 9.

12.3 Bioaccumulative potential Log Pow = 5.3 at 21°C

12.4 Mobility in soil No further relevant information available.

Ecotoxical effects:

Remark: Harmful to aquatic organisms.

Additional ecological information:

General notes:

Do not allow product to reach ground water, water course or sewage system, even in small quantities.

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12.5 Results of PBT and vPvB assessment

PBT: Not applicable. **vPvB:** Not applicable.

12.6 Other adverse effects No further relevant information available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Recommendation

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

Must be specially treated adhering to official regulations.

Uncleaned packaging:

Recommendation:

Do not reuse packing for other products.

Disposal must be made according to official regulations.

SECTION 14: Transport informat	ion
14.1 UN-Number ADR, ADN, IMDG	Void
14.2 UN proper shipping name ADR, ADN, IMDG	Void
14.3 Transport hazard class(es)	
ADR, ADN, IMDG Class	Void
14.4 Packing group ADR, IMDG	Void
14.5 Environmental hazards: Marine pollutant:	No
14.6 Special precautions for user	Not applicable.
14.7 Transport in bulk according to Ani of Marpol and the IBC Code	nex II Not applicable.
Transport/Additional information:	Not dangerous according to the above specifications.
UN "Model Regulation":	Void

SECTION 15: Regulatory information

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

Directive 2012/18/EU

Named dangerous substances - ANNEX I None of the ingredients is listed. REGULATION (EC) No 1907/2006 ANNEX XVII Conditions of restriction: 3

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National regulations:

Information about limitation of use:

Young people (under the age of 18) are not allowed to work with the product (Directive 2014/27/EU amending Council Directive 94/33/EC).

Waterhazard class: Water hazard class 2 (Self-assessment): hazardous for water.

Other regulations, limitations and prohibitive regulations

Avoid any unnecessary contact with the product.

Any misuse may cause health problems.

15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship. This material safety data sheet was created in accordance with the Commission Regulation (EU) 2015/830 amending Regulation (EC) No 1907/2006.

Relevant phrases

H226 Flammable liquid and vapour.

H302 Harmful if swallowed.

H315 Causes skin irritation.

H318 Causes serious eye damage.

H335 May cause respiratory irritation.

H336 May cause drowsiness or dizziness.

H373 May cause damage to organs through prolonged or repeated exposure.

H412 Harmful to aquatic life with long lasting effects.

Department issuing SDS: Regulatory Affairs

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Abbreviations and acronyms:

EC50: Effective concentration, 50 percent

FIFRA: Federal Insecticide, Fungicide and Rodenticide Act

OECD: Organisation for Economic Co-operation and Development

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road

IMDG: International Maritime Dangerous Goods Code GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service

TRGS: Technische Regeln für Gefahrstoffe (Technical Rules for Hazardous Substances)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Flam. Liq. 3: Flammable liquids - Category 3

Acute Tox. 4: Acute toxicity - Category 4

Skin Irrit. 2: Skin corrosion/irritation - Category 2

Eye Dam. 1: Serious eye damage/eye irritation - Category 1

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Skin Sens. 1B: Skin sensitisation – Category 1B STOT SE 3: Specific target organ toxicity (single exposure) – Category 3 STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2 Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard – Category 3

* Data compared to the previous version altered.

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