SAFETY DATA SHEET

Safety data sheet according to (EF) no. 1907/2006.

POINT 1: Identification of material/compounds and of the company/factory

1.1. Product identifier:

Eurovit K₃-2000

1.2. Relevant identifying use of the material or compound and the usage that is contraindicated:

Vitamin mixture used as a feed ingredient.

1.3. Detailed information about the supplier for the safety data sheet:

Jorenku A/S

Teglvaerksvej 11

4733 Tappernoeje

Denmark

Tel.: +45 56214070

Responsible for safety data sheet (e-mail): jorenku@jorenku.dk

1.4. Emergency phone:

Contact the poison centre in your own country.

POINT 2: Identification of danger

2.1. Classification of the material or compound:

Environmentally hazardous liquid.

CLP (1272/2008): Aquatic Chronic 3;H412

2.2. Label elements:

H412: Harmful to aquatic life with long lasting effects.

P273: Avoid release to the environment.

2.3. Other dangers:

PBT/vPvB: The ingredients are not PBT/vPvB according to the criteria in REACH annex XIII. Endocrine disrupting properties: The ingredients are not considered endocrine disruptors according to the criteria of Regulation 2017/2100 or Regulation 2018/605.

POINT 3: Compensation of/information about contents

3.1. Compensation of/information about contents

3.2. Compounds:

Substance name	CAS	EF-No.	Index-no.	REACH reg.no.	Substance Classification	Note
Menadione	130-37-0	204-987-0	607-618-00-5	-	Skin Irrit. 2;H315	-
nicotinamide					Eye Irrit. 2;H319	
bisulphite					Aquatic Acute 1;H400	
(Vitamin K ₃)					Aquatic Chronic 1;H410	

The wording of the hazard statements - see paragraph 16.



POINT 4: First aid measures

4.1. Description of first aid measures:

Inhalation: Bring the person to fresh air. Keep calm under supervision. In case of discomfort: See

medical attention.

Skin: Remove contaminated clothing. Rinse skin and wash thoroughly with soap and water. In

case of discomfort: See medical attention.

Eyes: Rinse thoroughly with water or physiological saline. If possibly remove contact lenses

and open the eye wide. By continued irritation: Seek medical attention.

Ingestion: Immediately rinse mouth thoroughly and drink water in copious amounts. **Do not**

induce vomiting. If vomiting occurs, keep the head low to avoid stomach contents in

the lungs.

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

Severe eye irritation with redness and pain. Ingestion can cause nausea, vomiting, diarrhea and cramps.

4.3. Indication of whether emergency medical attention and special treatment are needed:

Show this safety data sheet to doctors or casualty ward.

POINT 5: Fire suppression

5.1. Suppression methods:

Cannot burn. Use suitable extinguishing agents against surrounding fire.

5.2. Special dangers in connection with the material or compound:

Not relevant.

5.3. Indication for a fire department:

Use compressed air mask for heavy smoke.

POINT 6: Accidental release measures

6.1. Personal precautions, personal protective equipment, and emergency procedures:

Use personal protective equipment - see point 8. Ensure good ventilation.

6.2. Environmental protection indications:

Avoid discharge to drains - see point 12. Inform local environmental authorities in case of spillage to the environment.

6.3. Methods and equipment for containment and cleaning:

Collect and handle as chemical waste. Rinse thoroughly with water. Further waste handling - see point 13.

6.4. References to other points:

See above.

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POINT 7: Handling and storage

7.1. Measures for safe handling:

Ensure effective ventilation. Avoid contact with skin and eyes. After use, wash with plenty of soap and water.

7.2. Conditions for safe storage, including any incompatibility:

Safe. Cool, dry and in well-closed original container and away from heat and direct sunlight.

7.3. Special usage:

See use - point 1.

PUNKT 8: Exposure control/personal protective equipment

8.1. Control parameter:

AT-limit value (reg. 1054 of 28.06.2022): None

DNEL/PNEC: None.

8.2. Exposure control:

Appropriate measures for exposure control: Provide effective ventilation.

Personal protective equipment:

Inhalation: Normally not necessary with effective ventilation.

Skin: Use protective gloves (EN374) of e.g. nitrile rubber (> 0.11 mm). It has not been possible

to find data for breakthrough time for the substance, so it is recommended to replace

the glove in case of spillage on them.

Eyes: Tightly fitted safety goggles (EN 166) in case of risk of splashes or eye contact.

Environmental exposure controls: Avoid release to the environment.

POINT 9: Physical and chemical characteristics

9.1. Information about basic physical and chemical characteristics:

Appearance: Liquid Colour: Not decided Odor: Characteristic Melting point/freezing point (°C): Not decided Boiling point or bubble-point and boiling point interval (°C): Not decided Ignitability (solid, gaseous): Not decided Upper/lower explosion limits (vol-%): Not decided Flash point (°C): Not decided Auto-ignition temperature (°C): Not decided Self-accelerating decomposition temperature (°C): Not relevant Not decided Kinematic viscosity (mm²/s at 40°C): Not decided Solubility (mg/l): Soluble in water

Partition coefficient n-octanol/water Log K_{au}: Not relevant - solution

(see point 12) Not decided Not decided

Density and/or relative density (g/cm³):

Relative vapor density (air=1):

Not decided

Particulate properties: Not decided for liquids

9.2. Other information:None known.

POINT 10: Stability and reactivity

10.1. Reactivity:

None known.

10.2. Chemical stability:

Vapor pressure (hPa, 20°C):

Stable under recommended storage conditions - see point 7.

10.3. Risk of dangerous reactions:

None known.

10.4. Conditions that should be avoided:

Air and light.

10.5. Materials that should be avoided:

Strong acids, bases and oxidizing agents as well as metal salts.

10.6. Dangerous decomposition products:

In case of fire, very toxic gases are formed.

POINT 11: Toxicological information

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

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

Skin corrosion/irritation: Based on available data, the classification criteria are not met.

Serious eye damage/eye irritation: Based on available data, the classification criteria are not met.

Respiratory or skin sensitization: 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.

Reproduction toxicity: Based on available data, the classification criteria are not met. Single STOT-exposure: Based on available data, the classification criteria are not met.

Repeated STOT-exposures: Based on available data, the classification criteria are not met.

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

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

No available/applicable data.

Usual exposure methods: Gastrointestinal tract.

Symptoms:

Inhalation: May be mildly irritating to the mucous membranes of the respiratory tract.

Skin: May be mildly irritating.

Eyes: May be irritating with redness and sting.

Ingestion: May be absorbed through the gastrointestinal tract. Nausea and diarrhoea may

occur.

Chronic effects: None known.

11.2. Information about other hazards: None known.

POINT 12: Environmental information

12.1. Toxicity:

No available/applicable data.

12.2. Persistence and degradability:

No available/applicable data.

12.3. Bioaccumulative potential:

No available/applicable data.

12.4. Mobility in soil:

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No available/applicable data.

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ORENKU Eurovit K₃-2000

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12.5. Results of PBT and vPvB assessment:

The ingredients are not PBT/vPvB according to the criteria in REACH annex XIII.

12.6. Endocrine-disrupting capacities:

None known.

12.7. Other adverse effects:

None known.

POINT 13: Removal

13.1. Methods for waste handling:

Use the local authority's collection scheme.

Chemical waste group: EAK-code: 02 02 99 Η

POINT 14: Transport information

- **14.1. UN-number or ID-number:** None.
- 14.2. UN-shipment designation (UN proper shipping name): None.
- 14.3. Transport danger class(es): None.
- **14.4. Packaging group:** None.
- **14.5. Environmental dangers:** None.
- **14.6. Special regulations for the user:** None.
- **14.7. Bulk transport by sea according to IMO instruments:** Not relevant.

POINT 15: Information about regulations

15.1. Special determinations/special rules for the material or compound with respect to safety, health and environment:

PR no.: Should not be reported - see point 16.

15.2. Chemical safety evaluation:

No CSR.

POINT 16: Other information

Hazard statements given under point 3:

H315: Causes skin irritation.

H319: Causes serious eye irritation.

H400: Very toxic to aquatic life.

H410: Very toxic to aquatic life with long lasting effects.

Abbreviations:

AT = Working environment authority

CMR = carcinogenic, mutagenic, or toxic to reproduction

CSR = Chemical Safety Report

DNEL = Derived No-Effect Level

EC₅₀ = Effect Concentration 50 %

 LC_{50}^{3} = Lethal Concentration 50 %

 LD_{50}^{30} = Lethal dosage 50 %

PBT = Persistent, Bioaccumulative, Toxic

PNEC = Predicted No-Effect Concentration





FW = Fresh Water vPvB = very Persistent, very Bioaccumulative

Advice on training / instruction:

The product may only be used by persons who are carefully instructed in the execution of the work and who have knowledge of the contents of this safety data sheet.

Further information:

The product should not be notified to the Product Register, as it is not covered by the notification requirements.

Changes since previous version:

Not relevant - first edition.

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