

SAFETY DATA SHEET
Gyros Protein Technologies
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Fax: (520) 629-9806**1. IDENTIFICATION OF SUBSTANCE/PREPARATION AND COMPANY****Identification of the product****Catalog numbers:** ACT-5-KOXY, ACT-25-KOXY, ACT-100-KOXY, ACT250-KOXY**Product name:** K-Oxyma**Alternate Name:** Ethyl cyanoglyxylate-2-oxyme potassium salt**Chemical name:** C₅H₅KN₂O₃.**Chemical Family:** Coupling reagent**Recommended Use:** Peptide synthesis**2. HAZARDS IDENTIFICATION****Classification of the substance or mixture**

This substance is not classified as dangerous according to European Union legislation.

Classification according to Regulation (EC) No 1272/2008

Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008.

Label elements**Labeling according Regulation (EC) No 1272/2008****Labelling (67/548/EEC or 1999/45/EC)**

The product does not need to be labelled in accordance with EC directives or respective national laws.

Further information

Caution - substance not yet tested completely.

Other hazards

None known.

3. COMPOSITION/INFORMATION ON INGREDIENTS**Synonyms** Ethyl cyanoglyxylate-2-oxyme potassium salt

Components	CAS #	Chemical Formula	Molecular Weight
K-Oxyma	158014-03-0	C ₅ H ₅ KN ₂ O ₃	180.20 g/mol

4. FIRST AID MEASURES

Description of first aid measures

General advice

Consult a physician. Show this safety data sheet to the doctor in attendance.

Eye Contact:

- Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes
- Cold water may be used
- Get medical attention immediately

Skin Contact:

- In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes
- Cold water may be used
- Wash clothing before reuse. Thoroughly clean shoes before reuse.
- Get medical attention immediately

Inhalation:

- If inhaled, move to fresh air. If not breathing, give artificial respiration
- If breathing is difficult, give oxygen
- Get medical attention immediately

Ingestion:

- If swallowed, do not induce vomiting unless directed to do so by medical personnel
- Never give anything by mouth to an unconscious person
- Loosen tight clothing such as a collar, tie, belt or waistband
- Drink water (two glasses at most)
- Get medical attention immediately

Most important symptoms and effects, both acute and delayed

The following applies to cyanogen compounds/ nitriles in general: utmost caution! Release of hydrocyanic acid is possible - blockade of cellular respiration. Cardiovascular disorders, dyspnoea, unconsciousness.

Indication of any immediate medical attention and special treatment needed

No data available

5. FIRE-FIGHTING MEASURES

Extinguishing media

Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Unsuitable extinguishing media

For this substance/mixture no limitations of extinguishing agents are given.

Special hazards arising from the substance or mixture

Development of hazardous combustion gases or vapors possible in the event of fire. Fire may cause evolution of nitrogen oxides, Hydrogen cyanide (hydrocyanic acid)

Advice for firefighters

Wear special protective equipment for firefighters. Wear self-contained breathing apparatus for firefighting if necessary.

Further information

Suppress (knock down) gases/vapors/mists with a water spray jet. Prevent fire extinguishing water from contaminating surface water or the ground water system.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid dust formation. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Avoid breathing dust. For personal protection see section 8.

Environmental precautions

Do not let product enter drains.

Methods and materials for containment and cleaning up

Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up dry. Dispose of properly. Clean up affected area. Avoid generation of dusts.

Reference to other sections

For disposal see section 13.

7. HANDLING AND STORAGE

Precautions for safe handling

Observe label precautions. Change contaminated clothing. Preventive skin protection recommended. Wash hands after working with substance.

Conditions for safe storage, including any incompatibilities

Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Recommended storage temperature 2 - 8 °C

Specific end use(s)

Apart from the uses mentioned in section 1 no other specific uses are stipulated

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Components with workplace control parameters

Exposure controls

Appropriate engineering controls

Technical measures and appropriate working operations should be given priority over the use of personal protective equipment. See section 7.

Personal protective equipment

Eyeface protection

Safety glasses with side-shields conforming to EN166. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Respiratory protection

Required when dusts are generated.

The researcher should ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer. These measures should be properly documented.

Control of environmental exposure

Do not let product enter drains.

9. PHYSICAL AND CHEMICAL PROPERTIES

Form:	Solid
Color:	Bright yellow powder
Odor:	N/A
Flashpoint:	N/A
Density:	N/A
Melting point:	145-155 °C
Water Solubility:	Soluble

10. STABILITY AND REACTIVITY

Stability

Stable under standard ambient conditions (room temperature)

Reactivity/ Hazardous Decompositions Products:

The following applies in general to flammable organic substances and mixtures: in correspondingly fine distribution, when whirled up a dust explosion potential may generally be assumed.

Chemical stability

Stable under recommended storage conditions (room temperature).

Possibility of hazardous reactions

Violent reactions possible with: Strong oxidizing agents. Generates dangerous gases or fumes in contact with: Acids

Conditions to avoid

No data available

Hazardous decomposition products

In the event of fire: see section 5

11. TOXICOLOGICAL INFORMATION

Information on toxicological effects

Acute toxicity: No data available

Skin corrosion/irritation: No data available

Serious eye damage/eye irritation: No data available

Respiratory or skin sensitization: No data available

Germ cell mutagenicity: No data available

Reproductive toxicity: No data available

Teratogenicity: No data available

Specific target organ toxicity - single exposure: No data available

Specific target organ toxicity - repeated exposure: No data available

Aspiration hazard: No data available

Additional Information

Hazardous properties cannot be excluded but are unlikely when the product is handled appropriately.

The following applies to cyanogen compounds/ nitriles in general: utmost caution! Release of hydrocyanic acid is possible - blockade of cellular respiration. Cardiovascular disorders, dyspnoea, unconsciousness.

Handle in accordance with good industrial hygiene and safety practice.

12. ECOLOGICAL INFORMATION

Toxicity: No data available

Persistence and degradability: No data available

Bio-accumulative potential: No data available

Mobility in soil: No data available

Results of PBT and vPvB assessment: PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

Other adverse effects: Discharge into the environment must be avoided

16. OTHER INFORMATION

The information accumulated herein is believed to be accurate but is not warranted to be whether origination with the company or not. Recipients are advised to confirm in advance of need that the information is current, applicable, and suitable to their circumstances. This MSDS has been prepared by Gyros Protein Technologies.

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