



MOBIHEL PE hardener 500

Revision No.:1
Revision Date:15/09/05**1. IDENTIFICATION OF THE PRODUCT AND OF THE SUPPLIER**

Product name: MOBIEL PE hardener 500
Item code: CUROX
Product general name: Organic peroxide solution.
Producer/supplier: HELIOS Tovarna barv, lakov in umetnih smol Količevo, d.o.o.Količevo 65,
1230 DOMŽALE, SLOVENIJA
tel. +386 1 722 4000, fax. +386 1 722 4040
Emergency phone : In case of health hazard, consult a private or a doctor on duty. For
additional information please call phone number +386 (1) 722 4381 (INDOK
dept.).

2. COMPOSITION AND INFORMATION ON INGREDIENTS

Description: Organic peroxide solution.

It contains the following health and environment hazardous ingredients:

Chemical name:	Conc.(%):	CAS. No.:	EC No.:	Index No.:	Symbol:	R- phrases:
Cyclohexanone peroxide	25-50	12262-58-7	235-527-7	617-010-00-1	E C	R2 R22 R34 R37
4-Hydroxy-4-methyl-pentan-2-one	25-50	123-42-2	204-626-7	603-016-00-1	Xi	R36
Cyclohexanone	2.5-10	108-94-1	203-631-1	606-010-00-7	Xn	R10 R20

3. HAZARD IDENTIFICATION

Hazards designation: May cause fire.Harmful if swallowed. Causes burns.

4. FIRST AID MEASURES

Symptoms caused by Dizziness, nausea, vomiting, difficult breathing, irritation of skin or eyes. In case of excessive exposure: these symptoms, seek medical help and show this data sheet.

In case of excessive inhalation: Breathe fresh air. Rest. Do not eat or drink until the symptoms disappear.

In case of ingestion: Do not eat. Drink only water. Do not induce vomiting.

In case of contact with skin and clothes: Remove contaminated clothes. Wash skin with water and soap. Do not use organic solvents or thinners.

In case of contact with eyes: Rinse with plenty of water for at least 15 minutes and seek medical help.

5. FIRE-FIGHTING MEASURES

Preventive measures: Remove all possible sources of fire, e.g. open flame, lit cigarette, sparks from tools and equipment. Always keep containers closed.

Fire extinguishers: Foam, powder, CO₂, to a limit also water spray.

Fire extinguishing measures: Put out fire in the direction of the wind. Spray non-burning containers with water, prevent product leakage and move containers to a safe space. In case of fire, health damaging gases and soot may appear. The use of a respiratory mask with filter A is recommended.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions: Avoid possible sources of ignition (fire, lit cigarette, sparks, etc.). Protect respiratory system against inhalation of vapours. Provide good ventilation.

Environmental precautions: Do not allow spilling into water, watercourses, cellars, caves or drains and the accumulation of vapours in closed rooms.

Methods of cleaning up: Absorb and mix the spilled product with soil, sand or any other absorbent material for liquids. Dispose the mixture to a deposit site for special or dangerous waste or burn in the incinerator.

7. HANDLING AND STORAGE

Handling: During handling the product ventilate the area.
Follow valid regulations on the emission of dangerous substances into the environment (par. 12) and explosion points (par. 9).
Follow safety at work regulations.
Keep containers tightly closed. Store in places out of reach of unskilled people. Do not eat, drink or smoke while using the product.

Storage: Do not store together with food or animal food. Store in a tightly closed container in a dry and well ventilated room at the temperature from 10 to 25°C, separated from heat and direct sunlight.
The packaging should be marked with the supplier's original label.

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

Personal protection: Adjust safety protection to the product application technology. Use materials resistant to organic solvents (rubber, special plastic). Use only spark-free tools.

Respiratory protection: Provide such ventilation at the site of use so that the concentration of solvent vapours present in product will not exceed the threshold limit value (TLV).

The prescribed of threshold limit value (TLV) hazardous substances in the work place atmosphere according to the Regulations on the safety of employees and protection against chemical substance exposure at work (German TRGS 900):

Chemical name	CAS No.	TLV (mg/m ³)
4-Hydroxy-4-methyl-pentan-2-one	123-42-2	96
Cyclohexanone	108-94-1	40,8

Hand protection: Use materials resistant to organic solvents (rubber, special plastic). Always wear protective gloves.

Eye protection: Wear safety goggles, face protection when spraying.

Skin protection: Wear safety clothes.

9. PHYSICAL AND CHEMICAL PROPERTIES

Form:	Liquid
Colour:	Colorless
Odour:	Characteristic
pH:	N.A.
Boiling point:	169° C 4-Hydroxy-4-methyl-pentan-2-one
Flash point:	110° C ISO 3679
Ignition point:	620° C 4-Hydroxy-4-methyl-pentan-2-one
Density (kg/l):	1.04 ISO 2811
Viscosity:	DIN 53019 20° C 0 - 29 mPas
Explosion limits lower (wt. %):	1.8
Explosion limits upper (wt. %):	6.9
Vapour pressure (Pa/20° C):	120 4-Hydroxy-4-methyl-pentan-2-one
Solubility in water:	Insoluble

10. STABILITY AND REACTIVITY

Stability: The product is stable under the normal handling, storage and use conditions. Keep tightly closed in the original packaging.

Incompatibility: Not reactive and compatible with the majority of usual substances, except for extreme oxidants. Keep tightly closed in the original packaging.

11. TOXICOLOGICAL INFORMATION

Inhalation: Long inhalation of the organic solvents present in product in concentration, which exceeds the declared threshold limit value (TLV) (Chap. 8), may irritate the mucous tissue of respiratory system and even affect the normal functioning of liver, kidney and central nervous system.

Ingestion: At the ingestion the product may cause tissue damages in digestive tract.

Contact with skin: Long and intensive contact with skin may cause the skin to become dry.

Contact with eyes: Product drops or its vapours in high concentrations may cause irritation of eyes.

The symptoms of the product's effects on the human body are stated in Chapter 4.

Chemical name:	CAS No.	LC50 inhalation	LD50 - Oral	LD50 Dermal
4-Hydroxy-4-methyl-pentan-2-one	123-42-2	Inhalation LC50 Rat > 5 mg/l	Oral LD50 Rat > 2000 mg/kg	

12. ECOLOGICAL INFORMATION

The product contains 40-50 % of volatile organic substances, for which the emission in air is defined by the Regulation on emission in air for pollution source plants (The German TA -Luft 1994).

In nature the product is not easily bio-degradable. The product should not be spilled in the ground, water, watercourses, drains and the cleaning device.

The recommended degradation method is the use of the high temperature incinerator.

Chemical name	CAS No.	Ecotoxicity conc.:
4-Hydroxy-4-methyl-pentan-2-one	123-42-2	Aquatic LC50 bacteriae > 5000 mg/l Aquatic LC50 (48h) Daphnia > 1000 mg/l Aquatic LC50 fish > 100 mg/l

13. DISPOSAL CONSIDERATIONS

Contaminated products: The product leftovers, waste and useless packaging should be handled in accordance with the Regulations on processing of special and dangerous waste (dir. 91/689/EEC, dir. 2000/532/EC).

Waste classification number: 08 01 11
Waste hazardous characteristic: H 8

The recommended degradation method is the use of the controlled high temperature incineration or disposal to the deposits for dangerous substances.

Contaminated packaging: In case the metal packaging can not be reused, it will be recycled in the ironworks or disposed at special deposits (dir. 94/62/EC, dir. 1999/177/EC).

14. TRANSPORT INFORMATION

Transport by road/by railway - ADR/RID:

UN No:	3105
Class:	5.2 Organic peroxides
Symbol of hazard:	5.2

Transport by sea - IMDG:

UN No:	3105
Class:	5.2
Label:	5.2

15. REGULATORY INFORMATION

Labelling: O



OXYDIZING
C



CORROSIVE

Contains: Cyclohexanone peroxide

R-phrases: R 22 Harmful if swallowed.
R 7 May cause fire.
R 34 Causes burns.
S-phrases: S 3/7 Keep container tightly closed in a cool place.
S 14 Keep away from reducing agents, strong acids, lyes and heavy metal salts.
S 36/37/39 Wear suitable protective clothing, gloves and eye/face protection.
S 45 In case of accident or if you feel unwell, seek medical advice immediately.
S 50 Do not mix with reducents.

FOR PROFESSIONAL USE ONLY!

Regulations: This safety data sheet has been prepared according to the Directive 67/548, 88/379, 92/32, 99/45.

16. OTHER INFORMATION

Meaning of R sentences from the Chapter 2: R 2
sources of ignition.

Risk of explosion by shock, friction, fire or other

R 22 Harmful if swallowed.
R 34 Causes burns.
R 37 Irritating to respiratory system.
R 36 Irritating to eyes.
R 10 Flammable.
R 20 Harmful by inhalation.

The information in this Safety Data Sheet refer only to the mentioned product in the form as delivered and it is not necessary valid when this material is used in the combination with other materials or in the processes, which are not foreseen in the instructions for use. This information is correct to the supplier's best of knowledge and reliable at the time of the publication of this Safety data sheet. It is the user's responsibility to ascertain the suitability of the product for a specific use.

The data in this Safety data sheet do not prove the quality of the product, they are only the instructions for the safe use of the product with the user.

In case of non-compliance with the measures or incorrect use of the product, stated in the Safety data sheet we do not accept any responsibility for the consequences.