

Material Safety Data Sheet according to 91/155/EEC

degussa.

Product:

CUROX M-200

Catalysts & Initiators

Print Date:

17.09.01

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

Commercial product name: CUROX M-200

Producer/ supplier: Peroxid-Chemie GmbH & Co. KG
Dr.-Gustav-Adolph-Str. 3, D-82049 Pullach
Germany

**Emergency information
(phone number):** +/ 49/ 89 - 74422-0

2. Composition/information on ingredients

Product description:

Methyl ethyl ketone peroxide (MEKP), liquid mixture

Chemical characterisation (preparation):

Methyl ethyl ketone peroxide(s) CAS-no.: 1338-23-4	EEC-no.: 215-661-2	C, R34; Xn, R22; approx. 35%
4-Hydroxy-4-methyl-pentan-2-one (Diacetone alcohol) CAS-no.: 123-42-2	EEC-Nr.: 204-626-7	Xi, R36; approx. 10-20%
Di-iso-butylphthalate CAS-no.: 84-69-5	EEC-no.: 201-553-2	N, R50/53; approx. 50-60%
Methyl ethyl ketone CAS-no.: 78-93-3	EEC-no.: 201-159-0	Xi, R36; R66; R67; < 5%
Hydrogen peroxide CAS-no.: 7722-84-1	EEC-Nr.: 231-765-0	C, R34; < 5%

3. Hazards identification

Special hazards (concerning man and environment):

May cause fire. Harmful if swallowed. Causes burns.

4. First aid measures

General advice:

Take off immediately all contaminated clothing.

First aid external:

After skin contact: Wash skin with soap and plenty of water. Seek medical advice.

In case of contact with eyes, rinse immediately with plenty of water. Ensure adequate flushing of the eyes by separating the eyelids with fingers. Then seek medical advice.

First aid internal:

If inhaled: Bring victim to the fresh air. In doing so, observe self-protection. Seek medical advice immediately.

If swallowed: Rinse mouth thoroughly with water and then drink copious amounts of water. Do not induce vomiting. Seek medical advice immediately.

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5. Fire-fighting measures

Suitable extinguishing media:

Water mist, foam, dry powder (for small fires)

Unsuitable extinguishing media:

Water jet

Additional advices:

In case of fire and decomposition formation of inflammable, irritant, corrosive, harmful/ toxic gases and vapours possible. Do not breathe fire gases. Wear self-contained breathing apparatus and fully protective clothing. Fight the blaze from a safe distance.

6. Accidental release measures

Methods for cleaning up:

Take/ pick up cautiously (e.g. with a clean PE-shovel). Avoid friction. Alternatively or in addition, soak up with inert absorbent material (e.g. Vermiculit, clean sand).

Avoid contact with the product. Wear personal protective equipment.

Ensure good ventilation and exhaust ventilation. Do not breathe vapour. Use suitable respiratory protection.

Keep away from sources of ignition - No smoking.

Never add other substances or other waste to product residues. Bring product residues to a safe place and eliminate immediately in accordance with locally valid waste disposal regulations.

Avoid release to the environment. Product must not be disposed of into sewerage system!

7. Handling and storage

Safe handling advice:

The product should be stored in the closed supply container at temperatures below **30°C**. Keep in a dry, well-ventilated place. Keep away from ignition and heat sources (e.g. direct sun light). Keep separated from other dangerous and incompatible substances. Avoid contamination with e.g. rust, dust, ash (danger of decomposition).

Avoid contact with skin, eyes and clothing. Wear personal protective equipment. At the end of work and before breaks, hands should be washed. Prophylactic skin protection recommended.

Use with adequate ventilation. Suction off product vapours at their point of generation. Avoid formation of aerosols. Do not breathe vapour/ aerosol. Wear suitable respiratory protection if necessary.

Peroxide residues must not be returned into the original container, danger of decomposition!

Protection against fire and explosion:

Under recommended storage conditions in the original container no explosion risk.

Flammable liquid. Product burns violently. Formation of ignitable/ explosive vapour-air-mixtures possible. Keep away from sources of ignition - No smoking. Take precautionary measures against static discharges.

In case of decomposition without flames, explosion risk exists due to developing gas-air-mixture.

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8. Exposure controls / personal protection

Components with control parameters:

Methyl ethyl ketone peroxide(s)

TLV (USA), STEL (Literature data, April 1998): 0,2ppm (1,5mg/m³).

4-Hydroxy-4-methyl-pentan-2-one (Diacetone alcohol):

TRGS 900 (Nov. 1998): 50ppm (240mg/m³).

Methyl ethyl ketone

TRGS 900 (Nov. 1998): 200ppm (600mg/m³); H = danger of percutaneous absorption; Y; DFG.

TRGS 903 (Sept. 1999), BAT-Value: 5mg/l (urine).

TRGS 905 (Nov. 1999). TRGS 906 no. 38 (Sept. 1998).

Hydrogen peroxide:

TRGS 900 (Nov. 1999): 1ppm (1,4mg/m³).

TRGS 905 (March 2000); TRGS 906 (Dec. 1999) no. 63.

TRGS = Technische Regeln für Gefahrstoffe (Germany)

Personal protective measures:

Do not eat, drink or smoke while handling the product. Wear suitable protective clothing, gloves, eye/face protection and suitable respiratory protection.

9. Physical/chemical properties

Form/ physical state:

liquid

Color:

colorless

Smell:

stinging, ketone-like

Meltingpoint:

liquid to below -25°C

Boilingpoint:

n.a (decomposition!)

Flash point:

approx. 77°C (ISO 3679/80, SETAFLASH)

Ignition temperature:

n.d.a

Explosion limits:

n.d.a

Vapour pressure:

n.d.a

Density:

approx. 1,06g/cm³ at 20°C

Solubility:

not miscible with water; miscible with phthalate

pH:

n.d.a

Partition coefficient (log Pow):

n.d.a

Viscosity:

approx. 36 mPas at 20°C

Refraction index:

approx. 1,465 at 20°C

10. Stability and reactivity

Conditions to avoid:

Keep away from sources of ignition and heat. At or above 60°C self-accelerating decomposition possible.

Materials to avoid:

Heavy metal (salts), strong acids and bases, reducing agents, accelerators. Contaminants (e.g. rust, dust, ash). Combustible materials.

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Hazardous decomposition products:

In case of fire and decomposition formation of inflammable, irritant, corrosive, harmful/ toxic gases and vapours.

Thermal decomposition:

SADT (UN-Test H.4): approx. 60°C

11. Toxicological information

Methyl ethyl ketone peroxide(s):

LD50 (oral, rat): 1017mg/kg (MEKP-40% in Dimethylphthalate; 1976)

LD50 (oral, rat): 484mg/kg (MEKP-60% in Dimethylphthalate; 1958)

LD50 (dermal, rat): >> 1,8ml/kg and < 3,6ml/kg (MEKP-60% in Dimethylphthalate; 1979)

LC50 (inhalation, rat, 4h, aerosol): 17 (13-22)mg/l (MEKP-40% in Dimethylphthalate; nominal-concentration; 1976). 33 (26-41)mg/l (MEKP-40% in Dimethylphthalate; nominal-concentration; 1976).

50 (40-63)mg/l (MEKP-33% in Dimethylphthalate; nominal-concentration; 1977).

Severely irritating/ corrosive to skin and eyes.

Sensitization: Some cases reported (humans) in literature. GPMT: Not sensitizing (MEKP-40% in Dimethylphthalate/ Diacetone alcohol).

AMES-Tests:

Not mutagenic in TA 98, 100, 1535, 1537, +/- rat and hamster S9.

Not mutagenic in TA 98, 100, 1535, 1537, 1538; +/- S9 (MEKP-33% in Dimethylphthalate).

Not mutagenic in TA 98, 100, 1535, 1537, 1538, +/- S9 (MEKP-35% in Di-iso-butylphthalate).

Weakly mutagenic in TA 102, +/- rat S9.

In vitro gene mutations assay (Mouse Lymphoma Cells, -S9): Mutagenic at cytotoxic concentrations.

Clastogenic (+/- rat S9; in vitro chromosomal aberration; CHO-cells).

Not clastogenic (in vivo micronucleus assay, mouse).

Weakly genotoxic (+/- rat S9; in vitro sister chromatid exchange assay, CHO-cells).

12. Ecological information

Methyl ethyl ketone peroxide(s) (MEKP-33% in Dimethylphthalate):

Fish toxicity (P. reticulata): LC50 (96h) = 44,2mg/l.

Activated sludge respiration inhibition test: EC50 = 48mg/l.

Biodegradability (Closed Bottle Test, OECD 301D): Readily biodegradable.

Di-iso-butylphthalate:

Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

The product has to be classified as being dangerous to water. Avoid release to the environment. In case of spillage or leakage appropriate measures have to be taken immediately.

13. Disposal considerations

Eliminate in accordance with locally valid waste disposal regulations.

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*Catalysts & Initiators***16. Other information**

Abbreviations: n.a = not applicable; n.d.a = no data available

Changes: layout adaptation

The above information is accurate to the best of our knowledge and they are not meant to guarantee specific properties of the product. The existing regulations are to be observed by our customers at their own responsibility.

Department issuing the data sheet: Dept. QSU
