

according to the (US) Hazard Communication Standard (29 CFR 1910.1200)

Date of issue: 12/01/2014 Version 1.0

#### **SECTION 1. Identification**

#### **Product identifier**

Product number HX0640

Product name Hydrogen Peroxide 30% Solution

## Relevant identified uses of the substance or mixture and uses advised against

Identified uses Biochemical research/analysis

## Details of the supplier of the safety data sheet

Company EMD Millipore Corporation | 290 Concord Road, Billerica, MA 01821,

United States of America | General Inquiries: +1-978-715-4321 | Monday to Friday, 9:00 AM to 4:00 PM Eastern Time (GMT-5)

Emergency telephone 800-424-9300 CHEMTREC (USA)

+1-703-527-3887 CHEMTREC (International)

24 Hours/day; 7 Days/week

#### SECTION 2. Hazards identification

#### **GHS Classification**

Acute toxicity, Category 4, Oral, H302 Skin corrosion, Category 1A, H314 Serious eye damage, Category 1, H318

For the full text of the H-Statements mentioned in this Section, see Section 16.

#### **GHS-Labeling**

Hazard pictograms





Signal Word
Danger

Hazard Statements

H302 Harmful if swallowed.

H314 Causes severe skin burns and eye damage.

Precautionary Statements

according to the (US) Hazard Communication Standard (29 CFR 1910.1200)

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P264 Wash skin thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.

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

P301 + P312 IF SWALLOWED: Call a POISON CENTER or doctor/ physician if you feel unwell.

P301 + P330 + P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P303 + P361 + P353 IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing.

Rinse skin with water/ shower.

P304 + P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P310 Immediately call a POISON CENTER or doctor/ physician.

P321 Specific treatment (see supplemental first aid instructions on this label).

P363 Wash contaminated clothing before reuse.

P405 Store locked up.

P501 Dispose of contents/ container to an approved waste disposal plant.

#### Other hazards

None known.

## SECTION 3. Composition/information on ingredients

#### Hazardous ingredients

Chemical Name (Concentration)

CAS-No.

hydrogen peroxide ( >= 30 % - < 50 % )

7722-84-1

Exact percentages are being wihtheld as a trade secret.

#### SECTION 4. First aid measures

#### Description of first-aid measures

Inhalation

After inhalation: fresh air.

Skin contact

In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/shower.

Eve contact

After eye contact: rinse out with plenty of water. Immediately call in ophthalmologist.

Ingestion

After swallowing: immediately make victim drink water (two glasses at most). Consult a physician.

Never give anything by mouth to an unconscious person.

#### Most important symptoms and effects, both acute and delayed

Irritation and corrosion

Risk of serious damage to eyes.

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Dizziness, Unconsciousness, Diarrhea, Nausea, Vomiting, Headache, Convulsions, muscle twitching, insomnia, shock, Irritation and corrosion, conjunctivitis

#### Indication of any immediate medical attention and special treatment needed

No information available.

# SECTION 5. Fire-fighting measures

## Extinguishing media

Suitable extinguishing media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media

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

# Special hazards arising from the substance or mixture

Not combustible.

Has a fire-promoting effect due to release of oxygen.

## Advice for firefighters

Special protective equipment for fire-fighters

In the event of fire, wear self-contained breathing apparatus.

Further information

Prevent fire extinguishing water from contaminating surface water or the ground water system.

#### SECTION 6. Accidental release measures

#### Personal precautions, protective equipment and emergency procedures

Advice for non-emergency personnel: Do not breathe vapors, aerosols. Avoid substance contact. Ensure adequate ventilation. Evacuate the danger area, observe emergency procedures, consult an expert.

Advice for emergency responders:

Protective equipment 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 with liquid-absorbent material (e.g. Chemizorb®). Dispose of properly. Clean up affected area.

#### SECTION 7. Handling and storage

## Precautions for safe handling

Observe label precautions.

## Conditions for safe storage, including any incompatibilities

Close containers in such a way to enable internal pressure to escape (e.g. excess pressure valve).

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No metal containers.

Tightly closed. Protected from light. Do not store near combustible materials.

Store at  $+5^{\circ}$ C to  $+30^{\circ}$ C ( $+41^{\circ}$ F to  $+86^{\circ}$ F).

## SECTION 8. Exposure controls/personal protection

# Exposure limit(s)

Ingredients

Basis Value Threshold Remarks

limits

hydrogen peroxide 7722-84-1

ACGIH Time Weighted Average 1 ppm

(TWA):

NIOSH/GUIDE Recommended

exposure limit (REL): 1.4 mg/m³

OSHA\_TRANS PEL: 1 ppm

1.4 mg/m<sup>3</sup>

1 ppm

Z1A Time Weighted Average 1 ppm

(TWA): 1.4 mg/m<sup>3</sup>

#### **Engineering measures**

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

## Individual protection measures

Protective clothing should be selected specifically for the workplace, depending on concentration and quantity of the hazardous substances handled. The chemical resistance of the protective equipment should be inquired at the respective supplier.

#### Hygiene measures

Change contaminated clothing. Application of skin- protective barrier cream recommended.

Wash hands after working with substance.

#### Eye/face protection

Tightly fitting safety goggles

# Hand protection

Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.

## Other protective equipment:

protective clothing

## Respiratory protection

required when vapors/aerosols are generated.

Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

required when vapors/aerosols are generated.

according to the (US) Hazard Communication Standard (29 CFR 1910.1200)

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## SECTION 9. Physical and chemical properties

Physical state liquid

Color colorless

Odor slight

Odor Threshold No information available.

pH No information available.

Melting point No information available.

Boiling point No information available.

Flash point No information available.

Evaporation rate No information available.

Flammability (solid, gas) No information available.

Lower explosion limit No information available.

Upper explosion limit No information available.

Vapor pressure No information available.

Relative vapor density No information available.

Density No information available.

Relative density No information available.

Water solubility No information available.

Partition coefficient: n-

octanol/water

No information available.

Autoignition temperature No information available.

Decomposition temperature No information available.

Viscosity, dynamic No information available.

Explosive properties Not classified as explosive.

Oxidizing properties Oxidizing potential

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## SECTION 10. Stability and reactivity

#### Reactivity

Has a fire-promoting effect due to release of oxygen.

## **Chemical stability**

heat-sensitive Sensitivity to light

Stabilizer

tetrasodium diphosphate decahydrate

## Possibility of hazardous reactions

Risk of explosion with:

Risk of ignition or formation of inflammable gases or vapors with:

hydrazine and derivatives, hydrides, combustible substances, Ether, anhydrides, Oxidizing agents, Organic Substances, peroxi compounds, permanganates, organic solvent, organic nitro compounds, brass, Alkali metals, alkali salts, Alkaline earth metals, Metals, metallic oxides, metallic salts, nonmetals, nonmetallic oxides, Alcohols, Amines, Ammonia, acids, strong alkalis, Acetaldehyde, Acetone, Activated charcoal, anilines, Lead, Powdered metals, acetic acid, Acetic anhydride, Potassium, iodides, potassium permanganate, Methanol, sodium, oils, phosphorus, Oxides of phosphorus, conc. sulfuric acid, Heavy metals

silver, in powder form

alkali hydroxides, with, Heavy metals

vinyl acetate, with, Catalyst

Exothermic reaction with:

alkali hydroxides, Metals, Nitric acid, zinc oxide, metallic salts

phenol, with, metal catalysts

#### Conditions to avoid

Heating.

# Incompatible materials

Metals

#### Hazardous decomposition products

no information available

# SECTION 11. Toxicological information

## Information on toxicological effects

Likely route of exposure Eye contact, Skin contact

Acute oral toxicity

Acute toxicity estimate: 1,667 mg/kg

Calculation method

according to the (US) Hazard Communication Standard (29 CFR 1910.1200)

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Acute inhalation toxicity

Acute toxicity estimate: > 20 mg/l; 4 h

Calculation method Skin irritation Causes skin burns.

Eye irritation conjunctivitis

Mixture causes serious eye damage.

Specific target organ systemic toxicity - single exposure

The substance or mixture is not classified as specific target organ toxicant, single exposure.

Specific target organ systemic toxicity - repeated exposure

The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

Aspiration hazard

Regarding the available data the classification criteria are not fulfilled.

## Carcinogenicity

IARC No ingredient of this product present at levels greater than or

equal to 0.1% is identified as probable, possible or confirmed

human carcinogen by IARC.

OSHA No ingredient of this product present at levels greater than or

equal to 0.1% is identified as a carcinogen or potential

carcinogen by OSHA.

NTP No ingredient of this product present at levels greater than or

equal to 0.1% is identified as a known or anticipated carcinogen

by NTP.

ACGIH Confirmed animal carcinogen with unknown relevance to

humans.

hydrogen peroxide 7722-84-1

#### Further information

Systemic effects:

Headache, Dizziness, Nausea, Vomiting, Diarrhea, insomnia, muscle twitching, Convulsions, Unconsciousness, shock

Handle in accordance with good industrial hygiene and safety practice.

## Ingredients

hydrogen peroxide

Acute inhalation toxicity

Acute toxicity estimate: 11.1 mg/l; vapor

Expert judgment

#### **SECTION 12. Ecological information**

## **Ecotoxicity**

No information available.

## according to the (US) Hazard Communication Standard (29 CFR 1910.1200)

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## Persistence and degradability

No information available.

# Bioaccumulative potential

No information available.

#### Mobility in soil

No information available.

## Ingredients

#### hydrogen peroxide

Toxicity to fish

LC50 Pimephales promelas (fathead minnow): 16.4 mg/l; 96 h (IUCLID)

Toxicity to daphnia and other aquatic invertebrates

EC50 Daphnia magna (Water flea): 2.3 mg/l; 48 h (ECOTOX Database)

NOEC Daphnia magna (Water flea): 0.63 mg/l; 21 d (External MSDS)

Toxicity to algae

IC50 Pseudokirchneriella subcapitata (green algae): 5.7 mg/l; 72 h (ECOTOX Database)

Growth rate NOEC Skeletonema costatum: 0.63 mg/l; 72 h (External MSDS)

Toxicity to bacteria

static test EC50 activated sludge: 466 mg/l; 30 min

OECD Test Guideline 209

static test EC50 activated sludge: > 1,000 mg/l; 3 h

OECD Test Guideline 209

Biodegradability

Readily biodegradable.

Substance does not meets the criteria for PBT or vPvB according to Regulation (EC) No 1907/2006, Annex XIII.

## SECTION 13. Disposal considerations

The information presented only applies to the material as supplied. The identification based on characteristic(s) or listing may not apply if the material has been used or otherwise contaminated. It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste identification and disposal methods in compliance with applicable regulations. Disposal should be in accordance with applicable regional, national and local laws and regulations.

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#### SECTION 14. Transport information

Land transport (DOT)

UN number UN 2014

Proper shipping name HYDROGEN PEROXIDE, AQUEOUS SOLUTION

Class 5.1 (8)
Packing group II
Environmentally hazardous --

Air transport (IATA)

UN number UN 2014

Proper shipping name HYDROGEN PEROXIDE, AQUEOUS SOLUTION

Class 5.1 (8)
Packing group II
Environmentally hazardous -Special precautions for user yes

Not permitted for transport

Sea transport (IMDG)

UN number UN 2014

Proper shipping name HYDROGEN PEROXIDE, AQUEOUS SOLUTION

Class 5.1 (8)
Packing group II
Environmentally hazardous -Special precautions for user yes

EmS F-H S-Q

# SECTION 15. Regulatory information

#### **United States of America**

#### **SARA 313**

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

#### **SARA 302**

The following components are subject to reporting levels established by SARA Title III, Section 302:

Ingredients

hydrogen peroxide 7722-84-1

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#### Clean Water Act

This product does not contain any Hazardous Substances listed under the U.S. CleanWater Act, Section 311,

Table 116.4A.

This product does not contain any Hazardous Chemicals listed under the U.S. CleanWater Act, Section 311,

Table 117.3.

## **DEA List I**

Not listed

# **DEA List II**

Not listed

## **US State Regulations**

## Massachusetts Right To Know

Ingredients

hydrogen peroxide

## Pennsylvania Right To Know

Ingredients

hydrogen peroxide

## New Jersey Right To Know

Ingredients

hydrogen peroxide

# California Prop 65 Components

This product does not contain any chemicals known to the State of California to cause cancer, birth, or any other reproductive defects.

## **Notification status**

TSCA: All components of the product are listed in the TSCA-inventory.

DSL: All components of this product are on the Canadian DSL.

#### SECTION 16. Other information

#### Training advice

Provide adequate information, instruction and training for operators.

## Full text of H-Statements referred to under sections 2 and 3.

H302 Harmful if swallowed.

H314 Causes severe skin burns and eye damage.

H318 Causes serious eye damage.

## Key or legend to abbreviations and acronyms used in the safety data sheet

Used abbreviations and acronyms can be looked up at www.wikipedia.org.

# SAFETY DATA SHEET according to the (US) Hazard Communication Standard (29 CFR 1910.1200)

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Product name Hydrogen Peroxide 30% Solution

Date of issue:12/01/2014

The information contained herein is based on the present state of our knowledge. It characterizes the product with regard to appropriate safety precautions. It does not represent a warranty of any product properties and we assume no liability for any loss or injury which may result from the use of this information. Users should conduct their own investigations to determine the suitability of the information.

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