FICHA COM DADOS DE SEGURANÇA

Nome do Produto: PEROXIDO DE HIDROGENIO 8%

1 - Identificação

Nome do Produto: PEROXIDO DE HIDROGENIO 8%
Número da FDS: 446
Comercializado por: Morais de Castro Comércio e Importação de Produtos Químicos Ltda.
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1.1-Outras maneiras de identificação:
Main Product Applications

- Bleaching agents
- Chemical industry
- Electronic industry
- Metal treatment
- Odorizers
- Oxidizers
- Textile industry
- Manufacture of cellulose, paper and paper products

1.2-Usos recomendados do produto químico e restrições de uso:

2 - Identificação de perigos

2.1 Classification of the substance or mixture
Classification according to NBR 14725-2
Acute toxicity, Category 4 H302: Harmful if swallowed.
Serious eye damage, Category 1 H318: Causes serious eye damage.
Hazardous to the aquatic environment - Acute, Category 3 H401: Toxic to aquatic organisms.

2.2 Label elements
Labeling according to NBR 14725-3

Pictogramas:

Warning word
- Caution

Hazard statements
- H302 Harmful if swallowed.
- H318: Causes serious eye damage.
- H401 Toxic to aquatic organisms

Precautionary statements

Prevention
- P273 Avoid release to the environment.
- P280 Wear protective gloves / protective clothing / eye protection / face protection.

Emergency response
- P301 + P312 + P330 IF SWALLOWED: If you feel unwell, contact an INFORMATION CENTER TOXICOLOGICAL / doctor. Rinse your mouth.
- P301 + P330 + P331 IF SWALLOWED: Rinse mouth. DO NOT induce vomiting.
- P305 + P351 + P338 + P310 IF IN EYES: Rinse cautiously with water for several minutes. If using contact lenses, remove them if it is easy. Continue rinsing. Contact a TOXICOLOGICAL INFORMATION CENTER or doctor immediately.

Storage
- P403 + P233 Store in a well-ventilated place. Keep the container tightly closed.

Discard
- P501 Dispose of contents / container to an approved waste treatment plant.

2.3 Other hazards that do not result in classification
Not known

3 - Composição e Informações sobre os ingredientes

Product type : Mixture
Substance name : Hydrogen Peroxide
Concentration: > = 8 - < = 8.5 %
CAS : 7722-84-1

4 - Medidas de primeiros-socorros

4.1 Description of first aid measures
General recommendation
- Show this MSDS to the doctor on duty.

In case of inhalation
- Remove to a ventilated place.
- Oxygen, or artificial respiration, if necessary.
- Leave the victim lying down and put him in the resting position, keeping him warm and covering him with clothing.
- Call the doctor immediately.

In case of skin contact
- Remove contaminated clothing and shoes immediately.
- Rinse immediately with plenty of water.
- Keep warm and in a calm place.
- Call a doctor immediately or contact the Intoxication Center.
- Wash contaminated clothing before using it again.

In case of contact with the eye
- Call a doctor immediately or contact the Poisoning Center
- Rinse immediately with plenty of water, including under the eyelids, for at least 15 minutes.
- In case of difficulty in opening the eyelids, administer an analgesic eye drop (oxybuprocaine).
- Transport the patient to a hospital immediately.

In case of ingestion
- Call a doctor immediately or contact the Intoxication Center.
- Transport the patient to a hospital immediately.
- If swallowed, rinse the mouth with water repeatedly (only if the victim is conscious).
- DO NOT induce vomiting.
- Artificial respiration and / or oxygen may be required.
- If the victim is conscious:
- If swallowed, rinse the mouth with water repeatedly (only if the victim is conscious).
- DO NOT induce vomiting.
- If the victim is unconscious:
- Artificial respiration and / or oxygen may be required.

4.2 Most important symptoms and effects, acute and delayed
In case of inhalation
Symptoms
- Difficulty breathing
- Cough
- pulmonary edema
- Nausea
- Vomiting

Effects
- Corrosive to the respiratory system.

Repeated or prolonged exposure
- Bleeding from the nose
- Risk of chronic bronchitis

In case of skin contact
Symptoms
- Redness
- Swelling of tissues

Effects
- Corrosive
- Causes severe burns.

In case of contact with the eye
Symptoms
- Redness
- Tearing
- Swelling of tissues

Effects
- Corrosive
- Causes severe burns.
- Small amounts splashed into the eyes can cause irreversible tissue damage and blindness.

In case of ingestion
Symptoms
- Nausea
- Abdominal pain
- Vomiting with blood
- Diarrhea
- Suffocation
- Severe respiratory deficiency

Effects
- If swallowed, severe burns in the mouth and throat, as well as perforation of the esophagus and stomach.
- Risk of respiratory disorder

4.3 Indication of immediate medical attention and special treatment needed
Notes to doctor
- Transport the patient to a hospital immediately.
- Immediate medical opinion is required.
- Consult an ophthalmologist immediately in all cases.
- Burns must be treated by a doctor.
- If ingested
- Avoid gastric lavage (risk of perforation).
- Keep under medical care for at least 48 hours

5 - Medidas de combate a incêndio

5.1 Extinguishing media
Suitable extinguishing media
- Water
- misted water

Unsuitable extinguishing agents
- None).

5.2 Special hazards arising from the substance or mixture
- Oxidizing
- Favors combustion of combustible materials.
- Contact with flammable products can cause fire or explosion.
- Risk of explosion if heated indoors.
- Decomposition produces release of oxygen that can aggravate fires

5.3 Precautions for firefighters
Special equipment to protect people involved in fighting fires.
- Wear self-contained breathing apparatus in case of fire.
- Wear personal protective equipment.
- Wear chemical resistant clothing.

Additional information
- Keep the product and empty packaging away from heat and sources of ignition.
- Cool containers and surroundings with water spray.
- Approach against the wind.
- Avoid contamination of surface water and groundwater with fire-fighting water

6 - Medidas de controle para derramamento ou vazamento

6.1 Personal precautions, protective equipment and emergency procedures
Advice for non-emergency personnel
- Evacuate personnel to safe areas.- Keep people away from and upwind of spill/leak.

Advice for emergency responders
- Use personal protective equipment.
- Drying of this product on clothing or combustible materials may cause fire.
- Keep wetted with water.
- Prevent further leakage or spillage.
- Keep away from incompatible products

6.2 Environmental precautions
- Should not be released into the environment.
- If the product contaminates rivers and lakes or drains inform respective authorities.

6.3 Methods and materials for containment and cleaning up
- Dilute with plenty of water.
- Dam up.
- Do not mix waste streams during collection.
- Soak up with inert absorbent material.
- Keep in properly labelled containers.
- Keep in suitable, closed containers for disposal.
- Treat recovered material as described in the section "Disposal considerations".

6.4 Reference to other sections
- Refer to protective measures listed in sections 7 and 8.

7 - Manuseio e armazenamento

7.1 Precautions for safe handling
- Use only in well-ventilated areas.
- Before all operations, passivate the piping circuits and vessels according to the procedure recommended by theproducer.
- Use only clean and dry utensils.
- Never return unused material to storage receptacle.
- Keep away from heat.- Avoid inhalation, ingestion and contact with skin and eyes.
- Keep away from incompatible products

Hygiene measures
- Ensure that eyewash stations and safety showers are close to the workstation location.
- Take off contaminated clothing and shoes immediately.
- Wash contaminated clothing before re-use.
- When using do not eat, drink or smoke.
- Wash hands before breaks and at the end of workday.
- Handle in accordance with good industrial hygiene and safety practice.

7.2 Conditions for safe storage, including any incompatibilities
Technical measures/Storage conditions
- Keep only in the original container.
- Store in a well-ventilated place. Keep cool.
- Store in a receptacle equipped with a vent.
- Keep in properly labelled containers.
- Keep container closed.- Keep in a bunded area.
- Keep away from heat/sparks/open flames/hot surfaces. No smoking.
- Regularly check the condition and temperature of the containers.
- Keep away from: Incompatible products

Packaging material
Suitable material
- aluminium 99,5 %
- stainless steel 304L / 316L
- Approved grades of HDPE.

7.3 Specific end use(s)
- Contact your supplier for additional information

8 - Controle de exposição e proteção individual

8.1 Control parameters
Components with workplace occupational exposure limits
Components:hydrogen peroxid
Value type:TWA
Value:1 ppm
Basis: USA. ACGIH Threshold Limit Values (TLV)

8.2 Exposure controls
Control measures
Engineering measures
Provide adequate ventilation.
- Apply technical measures to comply with the occupational exposure limits.

Individual protection measures
Respiratory protection
- Use respirator when performing operations involving potential exposure to vapour of the product.
- When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.
- Respirator with a vapour filter (EN 141)
- Recommended Filter type: ABEK-P2
- Self-contained breathing apparatus in case of: 1) large uncontrolled emissions, 2) insufficient oxygen, 3) the maskand cartridge do not give adequate protection.

Hand protection
- Impervious gloves
- Take note of the information given by the producer concerning permeability and break through times, and of special workplace conditions (mechanical strain, duration of contact).

Suitable material
- PVC
- Natural Rubber- butyl-rubber- Nitrile rubber

Eye protection
- Chemical resistant goggles must be worn.
- If splashes are likely to occur, wear:
- Tightly fitting safety goggles
- Face-shield

Skin and body protection
- Impervious clothing- If splashes are likely to occur, wear:
- Chemical resistant apron
- Boots
- Suitable material
- PVC
- Natural Rubber

Hygiene measures
- Ensure that eyewash stations and safety showers are close to the workstation location.
- Take off contaminated clothing and shoes immediately.
- Wash contaminated clothing before re-use.
- When using do not eat, drink or smoke.- Wash hands before breaks and at the end of workday.
- Handle in accordance with good industrial hygiene and safety practice.

Environmental exposure controls- Dispose of rinse water in accordance with local and national regulations.

9 - Propriedades físicas e químicas

9.1 Information on basic physico-chemical properties
Aspect
Physical state: liquid
Color: colorless
Odorless odor
Odor Limit: no data available
Molecular weight: 34 g / mol
pH: 2.0 (21 ° C) 50% H2O2
pKa: 11.6 (25 ° C)
Melting / freezing point Freezing point: -0.43 ° C
Pure substance: -40.3 ° C H2O2 70%
Initial boiling point and boiling temperature range
Initial boiling point and boiling temperature range: 150.2 ° C
Pure substance: 125 ° C H2O2 70%
Flash point: Not applicable
Evaporation rate (Butyl acetate = 1): data not available
Flammability (solid, gas): Not applicable
Explosivity / Flammability Limit
Lower explosive / flammable limit: The product is not flammable.
Upper explosive / flammable limit: The product is not flammable.
Auto-ignition temperature: Not applicable
Vapor pressure: 200 hPa (30 ° C) 70% H2O2 / 214 hPa (20 ° C) Pure substance
Steam density: 1.02
Density: no data available
Bulk density: Not applicable
Relative density: 1.29 H2O2 70%
Relative density: 1.44 (25 ° C) Pure substance
Solubility
Solubility in other solvents: data not available
Partition coefficient (noctanol / water) log Pow: -1.57
Method: Calculation method
Decomposition temperature: no data available
Viscosity:
Dynamic viscosity: 1.26 mPa.s (20 ° C) 70% H2O2 / 1.249 mPa.s (20 ° C) Pure substance
Explosion hazards: Non-explosive
Oxidizing properties: Oxidizing

10 - Estabilidade e reatividade

10.1 Reactivity
- Strong oxidizer. Contact with other material may cause fire.
- Decomposes on heating with potential large quantities of gas release (oxygen).
- Potential for exothermic hazard

10.2 Chemical stability
- Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions
- Contact with combustible material may cause fire.
- Contact with flammables may cause fire or explosions.
- Contact with incompatible material may cause exothermic decomposition with gas release.
- Risk of explosion if heated under confinement.
- Fire or intense heat may cause violent rupture of packages.

10.4 Conditions to avoid
- Contamination
- To avoid thermal decomposition, do not overheat.

10.5 Incompatible materials
- Acids
- Bases
- Metals
- Heavy metal salts
- Powdered metal salts
- Reducing agents
- Organic materials
- Flammable materials

10.6 Hazardous decomposition products
- Oxygen

11 - Informações toxicológicas

11.1 Information on toxicological effects

Acute toxicity

Acute oral toxicity
Acute toxicity estimate : 431 mg/kg - Rat , male and female
Test substance: Hydrogen peroxide
Unpublished reports

Acute inhalation toxicity
LC50 - 4 h (vapour) > 0,17 mg/l - Rat
Test substance: Hydrogen peroxide
No mortality observed at this concentration.
Unpublished reports

Acute dermal toxicity
Acute toxicity estimate 6.440 mg/kg - Rabbit
Test substance: Hydrogen peroxide
Unpublished reports

Acute toxicity (other routes ofadministration)
no data available

Skin corrosion/irritation
Causes severe burns.

Serious eye damage/eye irritation
Causes serious eye damage.

Respiratory or skin sensitisation
hydrogen peroxide
Does not cause skin sensitisation.
not sensitising

Mutagenicity
Genotoxicity in vitro

hydrogen peroxide
Ames test with and without metabolic activation
positive
Published data

Chromosome aberration test in vitrowith and without metabolic activation
positive
Unpublished reports

Genotoxicity in vivo
hydrogen peroxide In vivo micronucleus test - Mouse
Oral
Method: OECD Test Guideline 474
negative
Unpublished reports

Carcinogenicity
hydrogen peroxide
no data available

Toxicity for reproduction and development
Toxicity to reproduction/Fertility
hydrogen peroxide
No toxicity to reproduction

Developmental Toxicity/Teratogenicity
hydrogen peroxide
No toxicity to reproduction

STOTSTOT - single exposure
hydrogen peroxide Exposure routes: Inhalation
Target Organs: Respiratory Tract
May cause respiratory irritation.

STOT - repeated exposure
hydrogen peroxide
The substance or mixture is not classified as specific target organ toxicant,repeated exposure according to GHS criteria.

hydrogen peroxide
Inhalation (vapour) 90-day - Rat
NOAEC: 7 ppm
Target Organs: Respiratory Tract
Method: OECD Test Guideline 413
Unpublished reports

90-day - Rat
NOAEL: 100 ppm
Target Organs: Gastrointestinal tract
Method: OECD Test Guideline 408
drinking water
Unpublished reports

Aspiration toxicity
no data available

12 - Informações ecológicas

12.1 Toxicity

Aquatic Compartment

Acute toxicity to fish

hydrogen peroxide LC50 - 96 h : 16,4 mg/l - Pimephales promelas (fathead minnow)

semi-static test

Analytical monitoring: yes

Unpublished internal reports

Harmful to fish.

Acute toxicity to daphnia and other aquatic invertebrates.

hydrogen peroxide EC50 - 48 h : 2,4 mg/l - Daphnia pulex (Water flea)

semi-static test

Analytical monitoring: yes

Unpublished internal reports

Toxic to aquatic invertebrates.

Toxicity to aquatic plants
hydrogen peroxide ErC50 - 72 h : 2,62 mg/l - Skeletonema costatum (marine diatom)

static test

Analytical monitoring: yes

Unpublished internal reports

Toxic to algae.

Toxicity to microorganisms

hydrogen peroxide EC50 - 0,5 h : 466 mg/l - activated sludge

static test

Analytical monitoring: yes

Method: OECD Test Guideline 209

Unpublished internal reports

Chronic toxicity to fish no data available

Chronic toxicity to daphnia and other aquatic invertebrates.

hydrogen peroxide NOEC: 0,63 mg/l - 21 Days - Daphnia magna (Water flea)

flow-through test

Analytical monitoring: yes

Published data

Harmful to aquatic invertebrates with long lasting effects.

Chronic Toxicity to aquatic plants no data available

12.2 Persistence and degradability

Abiotic degradation no data available

Physical- and photo-chemical

elimination

no data available

Biodegradation

Biodegradability

hydrogen peroxide
Ready biodegradability study:

Method: Degradation in sewage treatment plants

The substance fulfills the criteria for ultimate aerobic biodegradability and ready

biodegradability

Inoculum: activated sludge

Unpublished internal reports

Degradability assessment

hydrogen peroxide The product is considered to be rapidly degradable in the environment

12.3 Bioaccumulative potential

Partition coefficient: n-octanol/water

hydrogen peroxide Not potentially bioaccumulable

Bioconcentration factor (BCF)

hydrogen peroxide Not potentially bioaccumulable

12.4 Mobility in soil

Adsorption potential (Koc)

hydrogen peroxide Adsorption/Soil

Koc: 1,58

Log Koc: 0,2

Method: Structure-activity relationship (SAR)

Unpublished reports

Known distribution to environmental compartments

hydrogen peroxide Ultimate destination of the product : Water

12.5 Results of PBT and vPvB assessment
This mixture contains no substance considered to be persistent, bioaccumulating and toxic (PBT).

This mixture contains no substance considered to be very persistent and very bioaccumulating (vPvB).

12.6 Other adverse effects no data available

Ecotoxicity assessment

Acute aquatic toxicity

hydrogen peroxide Toxic to aquatic life.

Chronic aquatic toxicity

hydrogen peroxide Harmful to aquatic life with long lasting effects

13 - Considerações sobre destinação final

13.1 Waste treatment methods

Product Disposal

- Limited quantity
- Dilute with plenty of water.
- Flush into sewer with plenty of water.
- Maximum quantity
- Contact manufacturer.
- Contact waste disposal services.
- In accordance with local and national regulations.

Advice on cleaning and disposal of packaging

- Empty containers.
- Clean container with water.
- Dispose of rinse water in accordance with local and national regulations.
- Where possible recycling is preferred to disposal or incineration.
- In accordance with local and national regulations

14 - Informações sobre transporte

ANTT

14.1 UN number UN 2984
14.2 Proper shipping name HYDROGEN PEROXIDE, AQUEOUS SOLUTION
14.3 Transport hazard class 5.1
14.4 Packing group III Limited Quantity per transport 100 KG

ADR

14.1 UN number UN 2984
14.2 Proper shipping name HYDROGEN PEROXIDE, AQUEOUS SOLUTION
14.3 Transport hazard class 5.1
14.4 Packing group III

RID 14.1 UN number UN 2984
14.2 Proper shipping name HYDROGEN PEROXIDE, AQUEOUS SOLUTION
14.3 Transport hazard class 5.1
14.4 Packing group III

ADN
14.1 UN number UN 2984
14.2 Proper shipping name HYDROGEN PEROXIDE, AQUEOUS SOLUTION
14.3 Transport hazard class 5.1
14.4 Packing group III

15 - Informações sobre regulamentações

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
Notification status

- Technical advice
- ABNT NBR 14725: 2009
- ABNT NBR 14725-4-Part 4: Chemicals Safety Information Sheet FISPQ
- ABNT NBR 14725-2 - Part 2: Hazard classification system.
- RESOLUTION No. 5,232, OF DECEMBER 14, 2016

16 - Outras Informações

Full text of H-Statements referred to under sections 2 .
- H271 May cause fire or explosion; strong oxidiser.
- H302 Harmful if swallowed.
- H314 Causes severe skin burns and eye damage.
- H318 Causes serious eye damage.
- H335 May cause respiratory irritation.
- H401 Toxic to aquatic life.
- H412 Harmful to aquatic life with long lasting effects.

16.2. Other information
This MSDS is only intended for the indicated country to which it is applicable. MSDS applicable to other countries / regions are available on request.
The information contained in this sheet corresponds to the current state of our knowledge and experience in the product and is not exhaustive. Applies to the product under the conditions specified, unless stated otherwise. In case of combinations or mixtures, ensure that no new hazards can arise. This information does not exempt, in any case, the user of the product from respecting all the legislative, regulatory and administrative texts product, safety, hygiene and protection of human health and the environment.