

FICHA COM DADOS DE SEGURANÇA

Nome do Produto: SODA CAUSTICA EM ESCAMAS, 98%

Revisão: 00(English)

Data: 01/06/2020

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1 - Identificação

Nome do Produto: SODA CAUSTICA EM ESCAMAS, 98%

Número da FDS: 4785

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:

Manufacture of soaps and detergents, treatment of ferrous metal surfaces, formulation of electroplating baths, in the mercerization of textile products, in the regeneration of ion exchange resins and pH correction in various industrial processes - from food, alcohols and pharmacists

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

2 - Identificação de perigos

Hazard classification of the chemical:

Corrosive to metals - Category 1

Acute toxicity - Dermal - Category 4

Corrosion / irritation to skin - Category 1B

Serious eye damage / eye irritation - Category 1

Specific target organ toxicity - Single exposure - Category 3

Hazardous to the aquatic environment - Acute - Category 3

Classification system used:

ABNT NBR 14725-2

Globally Harmonized System for the Classification and Labeling of Chemicals, ONU.

Other hazards that do not result in classification: The product has no other hazards.

Appropriate labeling elements

Pictogramas:



Signal word: DANGER

Hazard statements:

H290 May be corrosive to metals.

H312 Harmful in contact with skin.

H314 Causes severe skin burns and eye damage.

H335 May cause respiratory irritation.

H402 Harmful to aquatic organisms

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Precautionary statements:

PREVENTION:

- P234 Keep only in the original container.
- P260 Do not inhale dust and mists.
- P261 Avoid inhaling dust and mists.
- P264 Wash hands thoroughly after handling.
- P271 Use only outdoors or in a well-ventilated area.
- P273 Avoid release to the environment.
- P280 Wear protective gloves, protective clothing, eye protection and face protection.

EMERGENCY RESPONSE:

- P301 + P330 + P331 IF SWALLOWED: Rinse mouth. DO NOT induce vomiting.
- P302 + P352 IF ON SKIN: Wash with plenty of soap and water.
- P303 + P361 + P353 IF ON SKIN (or hair):
Remove all contaminated clothing immediately. Rinse the skin with water or take a shower.
- P304 + P340 IF INHALED: Remove person to fresh air and keep at rest in a position suitable for do not make breathing difficult.
- P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. minutes. If using contact lenses, remove them, if easy. Continue rinsing.
- P310 Immediately contact a TOXICOLOGICAL INFORMATION CENTER or doctor.
- P312 If you feel unwell, contact a TOXICOLOGICAL INFORMATION CENTER or a doctor.
- P321 Specific treatment.
- P362 + P364 Remove all contaminated clothing and wash it before using it again.
- P363 Wash contaminated clothing before reuse.
- P390 Absorb spillage to prevent material damage.

STORAGE:

- P403 + P233 Store in a well-ventilated place. Keep the container tightly closed.
- P405 Store locked up.
- P406 Store in a corrosion resistant container or with a resistant inner liner.

DISPOSITION:

- P501 Dispose of contents and container in accordance with local regulations.

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3 - Composição e Informações sobre os ingredientes

SUBSTANCE

Chemical Name: Sodium Hydroxide

Synonym: Caustic Soda in Scales or Pearls

No. Registration Number: 1310-73-2

Impurities that contribute to the danger: There are no impurities that contribute to the danger

4 - Medidas de primeiros-socorros

Inhalation:

Remove the victim to a ventilated place and keep him at rest in a position that does not make breathing difficult. Exposure to product may cause burns in the respiratory tract. Prolonged contact can cause chemical pneumonia. If you feel unwell, contact a TOXICOLOGICAL INFORMATION CENTER or doctor. Take this MSDS.

Skin contact:

Immediately remove all contaminated clothing and wash before reuse. Rinse skin with water or take a shower. Risk of severe burns and tissue destruction. Contact an INFORMATION CENTER immediately TOXICOLOGICAL OR A DOCTOR. Take this MSDS.

Eye contact:

Rinse thoroughly with water for several minutes. If using contact lenses, remove them if it is easy and rinse again. Contact can cause severe damage, including burns and blindness. The severity of the effects depends on the concentration of the product and how long after exposure, the eyes were washed. Contact immediately a TOXICOLOGICAL INFORMATION CENTER or a doctor. Take this MSDS.

Ingestion:

Do not induce vomiting. Wash the victim's mouth with plenty of water. Never give anything by mouth to a person unconscious. If spontaneous vomiting occurs, provide additional water and keep the victim in an airy place. Can cause severe burns and complete perforation of the tissues of the mucous membranes of the mouth, throat, stomach and esophagus. If you feel unwell, contact a TOXICOLOGICAL INFORMATION CENTER or a doctor. Take this MSDS.

Most important symptoms and effects, acute or delayed:

Harmful in contact with skin. Causes severe skin burn with blistering, peeling and pain, and injuries severe eye damage with burning, watering and pain. May cause respiratory irritation with coughing and sneezing.

Notes to doctor:

Avoid contact with the product when helping the victim. If necessary, symptomatic treatment should include, above all, supportive measures such as correction of hydroelectrolytic and metabolic disorders, as well as respiratory assistance. In case of contact with the skin do not rub the affected area.

5 - Medidas de combate a incêndio

Extinguishing Media:

Suitable:

Compatible with water in the form of fog, CO2 or dry chemical.

Not recommended:

Direct water jets.

Specific hazards of the mixture or substance:

Although the product is not flammable, flammable gases may form when in contact with certain types of metals (see Section 10). Direct contact of water with the product can cause a violent exothermic reaction.

Fire protection team protection measures:

Self-contained breathing apparatus (SCBA) with positive pressure and complete protective clothing.

Containers and tanks involved in the fire must be cooled with water fog, but direct contact with water, may cause a violent exothermic reaction.

6 - Medidas de controle para derramamento ou vazamento

Personal precautions, protective equipment and emergency procedures

For personnel who are not part of the emergency services:

Prevent leakage from other sources of ignition. Evacuate the area within a radius of at least 25 meters.

Keep unauthorized persons away from the area. Stop the leak if it can be done without risk. Do not smoke.

Do not touch damaged containers or spilled material without wearing suitable clothing. Avoid exposure to product.

Personal Protective Equipment recommended in Section 8.

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For emergency service personnel:

Use PPE complete with safety glasses with side protection, safety gloves, PVC apron, protection against corrosive products (PVC or other equivalent material), PVC boots. The use of a mask is recommended respiratory protection (semifacial) with dust filter, in case of any exposure.

Environmental precautions:

Prevent spilled product from reaching waterways and sewage systems, due to its alkalinity-raising power of these water courses. Does not emit steam at room temperature.

Methods and materials for containment and cleaning:

Do not allow water to enter the containers. Collect the product with a clean shovel or other instrument that does not disperse the product. Place the material in appropriate containers and remove them to a safe place. For final destination, proceed in accordance with Section 13 of this MSDS

7 - Manuseio e armazenamento

Appropriate technical measures for handling

Precautions for safe handling:

Handle in a ventilated area or with a general local ventilation / exhaust system. Avoid formation of particles, dust and mists. Avoid exposure to the product. Avoid contact with incompatible materials. Use personal protection as described in Section 8.

Hygiene measures:

Wash hands and face thoroughly after handling and before eating, drinking, smoking or using the bathroom. Clothes contaminated materials must be replaced and washed before reuse. Remove protective clothing and equipment contaminated before entering feeding areas.

Conditions for safe storage, including any incompatibilities

Fire and explosion prevention:

The product does not present a fire or explosion hazard. However, it should not be put in contact with some metals (see Section 10), explosions may occur due to the formation of hydrogen gas.

Suitable conditions:

Store in a well-ventilated place, out of direct sunlight. Keep the container closed. No addition of stabilizers and antioxidants to ensure product durability. Keep stored at room temperature. This one product may react dangerously with some incompatible materials as outlined in Section 10.

Packaging materials:

Recommended: 25 kg polyethylene bags.

Not recommended: Paper, cardboard, metal and similar

8 - Controle de exposição e proteção individual

Control parameters

- Occupational exposure limit
Chemical or common name | TLV - C (ACGIH, 2016)
Sodium hydroxide | 2 mg / m³

Biological indicators:

Not established.

Other limits: IDLH (NIOSH, 2010): 10 mg / m³

Engineering control measures:

Promote mechanical ventilation and a direct exhaust system to the outside environment. These measures help to reduce the exposure to the product. It is recommended to make emergency showers and eye washers available in the work area. Keep concentrations of the substance or mixture in the air below the indicated occupational exposure limits.

Personal protection measures:

Eye / face protection:

Glasses with side protection.

Skin and body protection:

Appropriate protective gloves, PVC or rubber apron, acid-protective protective clothing (PVC or similar material) and rubber or PVC boots.

Breath protection:

Under normal conditions, there is no need, however in special situations, to use a mask (semi-facial) with filter against

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dust, full face mask with air line, or even, autonomous set of exchangeable.

Thermal hazards:

Wear personal protection when handling the heated substance and follow work and break procedures in warm environments.

9 - Propriedades físicas e químicas

Appearance (physical state, shape and color): Solid (in scales or pearls), white

Odor and odor limit: Odorless

pH: 12.7 (0.1M solution)

Melting point / Freezing point: 318 ° C

Initial boiling point and boiling temperature range: 1390 ° C (Information on 90-95% NaOH solution by weight)

Flash point: Not available

Evaporation rate: Not available

Flammability (solid; gas): Not flammable

Lower and upper flammability or explosive limits: Not flammable

Vapor pressure: 42 mmHg at 1000 ° C (Information regarding 90-95% NaOH solution by weight)

Vapor density: Not available

Relative density: Not available

Solubility (ies): 1090 g / L. Very soluble in water

Partition coefficient-n-octanol / water: Not available

Auto ignition temperature: Not available

Decomposition temperature: Not available

Viscosity: Not available

Other information: Not applicable

10 - Estabilidade e reatividade

Reactivity: Reacts with water, acids and some metals.

Chemical stability Stable product under normal conditions of temperature and pressure.

Possibility of hazardous reactions:

Reacts violently with strong acids (exothermic reaction), aldehydes, metals and other organic products. When wet attacks metals such as lead, aluminum, zinc, tin and copper, which can cause corrosion and hydrogen generation, which may form explosive mixtures with air.

Possibility of exothermic reaction when diluted with water, alcohol and glycerol.

Conditions to avoid: High temperatures and contact with incompatible materials.

Incompatible materials:

Aluminum, zinc, tin, copper, acids, aldehydes, organic products and water. Incompatible with class 1 explosives, except for subclass 1.4 of compatibility group "S", and with products of subclasses 4.1 and 5.2.

Hazardous decomposition products: Hazardous decomposition products are not known

11 - Informações toxicológicas

Acute toxicity:

Harmful in contact with skin. Based on available information, the classification criteria for oral and inhalation do not have been fulfilled.

LD50 (dermal, rats): 1350 mg / kg

Skin corrosion / irritation:

Causes severe skin burn with blistering, peeling and pain.

Serious eye damage / eye irritation:

Causes serious eye damage with burning, watering and pain.

Respiratory or skin sensitization:

Based on available information, the classification criteria were not met.

Germ cell mutagenicity:

Based on available information, the classification criteria were not met.

Carcinogenicity:

Based on available information, the classification criteria were not met.

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Reproductive toxicity:

Based on available information, the classification criteria were not met.

Specific target organ toxicity - single exposure:

May cause respiratory irritation with coughing and sneezing. Ingestion of the product in high doses can cause perforations in the tissues of the mouth, throat, esophagus and stomach.

Specific target organ toxicity - repeated exposure:

Based on available information, the classification criteria were not met.

Aspiration hazard:

Based on available information, the classification criteria were not met.

12 - Informações ecológicas

Environmental effects, behaviors and product impacts

Ecotoxicity

Harmful to aquatic organisms.

EC50 (Ceriodaphnia dubia, 48h): 40.4 mg / L.

Persistence and degradability

Due to the lack of data, it is expected that the product will persist and not be quickly degraded.

Bioaccumulative potential

Bioaccumulative potential is not expected in aquatic organisms.

Soil mobility

Not determined.

Other adverse effects

Caustic soda is harmful to aquatic life by increasing the pH. Most aquatic species do not tolerate pH in the range from 12 to 14 regardless of time. This increase in pH can also cause the release of metal salts, such as aluminum, which may also contribute to the exposed toxicity.

13 - Considerações sobre destinação final

Recommended methods for final disposal

Product

It must be disposed of as hazardous waste in accordance with local legislation. Treatment and disposal should be specifically assessed for each product. Federal, state and municipal laws should be consulted.

Product remains

Keep product remnants in their original and properly closed packaging. Disposal must be carried out according to the established for the product.

Used packaging

Do not reuse empty packaging. These may contain remnants of the product and must be kept closed and sent to be destroyed in an appropriate location as established for the product

14 - Informações sobre transporte

National and international regulations

Terrestrial

Resolution No. 5232 of December 14, 2016 of the National Land Transport Agency (ANTT), Approves the Complementary Instructions to the Regulation for the Inland Transportation of Dangerous Products and their modifications.

UN number: 1823

Proper shipping name: SODIUM HYDROXIDE, SOLID

Risk class / main risk subclass: 8

Risk class / subsidiary risk subclass: NA

Risk number: 80

Packing Group: II

Waterway

DPC - Directorate of Ports and Coasts (Transport in Brazilian waters) Maritime Authority Standards (NORMAM)

NORMAM 01 / DPC: Vessels Employed in Open Sea Navigation

NORMAM 02 / DPC: Vessels Employed in Inland Navigation

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International Maritime Organization
International Maritime Dangerous Goods Code (IMDG Code).
UN number: 1823
Proper shipping name: SODIUM HYDROXIDE, SOLID
Risk class / main risk subclass: 8
Risk class / subsidiary risk subclass: NA
Packing Group: II
EmS: F-A, S-B

Air

ANAC - National Civil Aviation Agency, V Resolution No. X129 of December 8, 2009.
RBAC No. 175 (BRAZILIAN CIVIL AVIATION REGULATION) - TRANSPORT OF DANGEROUS ARTICLES IN CIVIL AIRCRAFT.
IS Nº 175-001 SUPPLEMENTARY INSTRUCTION - IS
ICAO - "International Civil Aviation Organization", V Doc 9284-NA / 905
IATA - "International Air Transport Association" (International Air Transport Association)
Dangerous Goods Regulation (DGR).
UN number: 1823
Proper shipping name: SODIUM HYDROXIDE, SOLID
Risk class / main risk subclass: 8
Risk class / subsidiary risk subclass: NA
Packing Group: II

Danger to the environment:

-

15 - Informações sobre regulamentações

Specific regulations for the chemical:

Federal Decree No. 2,657, of July 3, 1998.
ABNT-NBR 14725: 2012 Standard.
Law No. 12,305, of August 2, 2010 (National Policy on Solid Waste).
Decree No. 7,404, of December 23, 2010.
Ordinance No. 229, of May 24, 2011 - Amends Regulatory Standard No. 26.
Ordinance No. 240, of March 12, 2019: Product subject to control and inspection by the Ministry of Justice - Department of Federal Police - MJ / DPF, from 1 (one) gram or 1 (one) milliliter, in any concentration, when dealing with export or re-export to Bolivia, Colombia and Peru

16 - Outras Informações

Important information, but not specifically described in the previous sections.

This MSDS was prepared based on current knowledge of the chemical and provides information on protection, safety, health and the environment.
It is warned that the handling of any chemical substance requires prior knowledge of its dangers by the user.
It is up to the company that uses the product to provide training to its employees and contractors regarding the possible risks from the product.

Captions and abbreviations:

ACGIH - American Conference of Governmental Industrial Hygienists
CAS - Chemical Abstracts Service
LD50 - Lethal dose 50%
EC50 - 50% Effective Concentration
LT - Tolerance Limit
NA - Not applicable
NR - Regulatory Standard
TLV - Threshold Limit Value

Bibliographic references:

AMERICAN CONFERENCE OF GOVERNMENTAL INDUSTRIAL HYGIENISTS. TLVs® AND BEIs®: based on documentation of occupational exposure limits (TLVs®) for chemicals and physical agents & indexes exposure factors (BEIs®). Brazilian Association of Occupational Hygienists. São Paulo, 2012.

CARBOCLORO S / A INDÚSTRIAS QUÍMICAS, FISPQ - Chemicals Safety Information Sheet: Soda anhydrous caustic, Rev. N° 08, São Paulo - SP, revision of January 23, 2013.

ECHA - EUROPEAN CHEMICALS AGENCY. Available in: . Accessed on: fev. 2013.

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MINISTRY OF LABOR AND EMPLOYMENT (MTE). Regulatory Norm (NR) n ° 7: Medical control program for occupational health. Brasília DF. Apr. 2011.

MINISTRY OF LABOR AND EMPLOYMENT (MTE). Regulatory Standard (NR) No. 15: Unhealthy activities and operations. Brasília DF. Jan. 2011

TOXNET - TOXICOLOGY DATA NETWORKING. ChemIDplus Lite. Available in: . Accessed on: Feb. 2013.