

**LIGHT BARREL**

REVISION DATE: 09/15/2022

1. - PRODUCT AND COMPANY IDENTIFICATION**Product name:** Light Barrel (Sodium Carbonate).**Internal Code of product identification:** 158.35.7.**Company name:** USIQUÍMICA DO BRASIL LTDA.**Address:** Rua da Lagoa, 431 - Cumbica - Guarulhos - SP.**Company Phone:** + 5511 3821-7000 (PBX system) - + 5511 2481-3355.**Emergency phone:** SUATRANS - COTEC - Environmental Emergency.

DDG (0800) 0111-767 - (0800) 7071-767 - 24 HOURS.


193 – Firefighters.

Main recommended uses for the substance: Chemical product used in the glass manufacturing industries, in the chemical industries for the synthesis of inorganic compounds, in the manufacture of soaps and detergents, among other applications.**2. - HAZARD IDENTIFICATION****Classification of Substance**

Acute Toxicity, Category 4, Oral. Corrosive/irritating to skin, category 1C.

Serious eye damage/eye irritation, category 1.

GHS label elements, including precautionary phrases.

LABEL ELEMENTS	DATA
Product identification and supplier emergency telephone number.	Commercial Name: Light barrel. Synonym: Sodium carbonate, disodium carbonate. Emergency phone: SUATRANS - COTEC - Environmental Emergency. DDG (0800) 0111-767 - (0800) 7071-767 - 24 HOURS.
Hazard pictograms.	
Warning words.	ATTENTION
Danger phrases.	H303 - May be harmful if swallowed. H316 - Causes mild skin irritation. H319 - Causes serious eye irritation.
Precautionary phrases.	P262 - Avoid contact with eyes, skin or clothing. H333 - May be harmful if inhaled. P273 - Avoid to release in the environment. P280- Use protective gloves/protective clothing/eye protection/face protection. P303 + P361 + P353- IN CASE OF SKIN CONTACT (or with the hair): Remove immediately all contaminated clothing. Wash the skin with water/take a shower. P304+P340+P310 - IN CASE OF INHALATION: Remove the person to a ventilated area and keep the person in a rest position that does not make it difficult to breathe. Contact a TOXICOLOGICAL INFORMATION CENTER or physician immediately. P305+P351+P338+P310 - IN CASE OF EYE CONTACT: Rinse thoroughly with water for several minutes. If contact lenses are used, remove them if it is easy. Continue rinsing. Contact a TOXICOLOGICAL INFORMATION CENTER or physician immediately. P308 + P311- IN CASE OF exposure or suspected exposure: Contact a TOXICOLOGICAL INFORMATION CENTER/doctor.

**LIGHT BARREL**

REVISION DATE: 09/15/2022

Other hazards which do not result in classification: It has no other dangers.

3. - COMPOSITION AND INFORMATION ABOUT INGREDIENTS

Substance: Na₂CO₃ (light barrel).

Common chemical name or generic name: Sodium carbonate / Disodium carbonate.

Chemical Abstract Service (CAS No): 497.19.8.

Impurities that contribute to the danger: Not applicable.

4. - FIRST AID MEASURES**First aid measures:**

Inhalation: Remove casualty to uncontaminated, ventilated area. If breathing is difficult, give oxygen. Apply resuscitation maneuvers in case of cardiorespiratory arrest. Immediately forward to the nearest hospital.

Skin contact: Remove clothing contaminated by the product. Wash contact areas with plenty of water. If irritation persists, seek medical attention.

Eye contact: Immediately wash eyes with running water for 15 minutes, lifting eyelids to allow maximum removal of product. seek medical attention.

Ingestion: If a large amount of this substance is ingested, refer immediately to a doctor.

What actions must be avoided: Do not induce vomiting. If vomiting occurs spontaneously, the victim must be laid on their side to prevent pulmonary aspiration. Never administer liquids to unconscious victims.

Brief description of the main symptoms and effects: May cause respiratory system irritation if dust is inhaled. May cause eye irritation which should cease after product removal. In case of prolonged exposure to the product, skin irritations are possible.

Notes to the physician: Avoid contact with the product to help the victim. Keep victim at rest and warm. Do not give anything by mouth to an unconscious person. The symptomatic treatment must include, above all, supportive measures such as correction of hydroelectrolytic, metabolic disorders, as well as respiratory assistance. In case of contact with the skin and/or eyes, do not rub the affected parts.

5. - FIREFIGHTING MEASURES

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

Unappropriated extinguishing measures: water gun.

Other relevant information: If water is used, restrict pedestrian and vehicle traffic in areas where there may be a danger of slipping.

Specific hazards: Burning can generate carbon oxides, sodium/sodium oxides. Carbon oxides, sodium oxides. The product does not burn.

Additional indications: The hazard depends on the burning products and the fire conditions. Contaminated fire-fighting water must be disposed of in accordance with official local regulations.

Fire fighter Protection: Special protective equipment for personnel assigned to fight fires. Do not stay in the danger zone without self-contained breathing apparatus suitable for breathing independently of the environment. To avoid skin contact, maintain a safe distance and wear suitable protective clothing. Refresh closed containers exposed to fire with water spray. Suppress (shoot down) with water jets (fog) gases, vapors and mists. Avoiding contamination of surface water and groundwater with fire fighting water.

6. - CONTROL MEASURES FOR SPILLING OR LEAKING**Personal precautions, protective equipment and emergency procedures:**

Personnel who are not part of the emergency services: Do not breathe vapors or aerosols. Avoiding contact with the substance. Ensuring adequate ventilation. Evacuating the danger area, observe emergency procedures. If necessary, consult an expert.

For the staff of the emergency department: Use complete PPE, with protective PVC gloves, safety glasses with side protection and suitable protective clothing. The material used must be waterproof. In case of large leaks, where exposure is high, it is recommended to use a protective mask with a filter against

**LIGHT BARREL**

REVISION DATE: 09/15/2022

vapors or mists. Spilled product that gets wet or spills from aqueous solutions creates a hazardous condition due to its slippery nature. Avoid generation of dust.

Removal of ignition sources: Keep away from sources of heat and ignition.

Prevention of inhalation and contact with skin, mucous membranes and eyes: See Section 8, Field: "Appropriate Personal Protective Equipment".

Precautions to the environment: Prevent spilled product from entering water courses. Collect the spilled product, place the material in appropriate containers for proper final destination.

Methods and materials for containment and cleaning: Use water mist or vapor suppressing foam to reduce vapor dispersion. Use natural or spill containment barriers. Collect spilled product and place in proper containers.

Disposal: Waste must be disposed of in accordance with current Environmental Legislation. Keep chemicals in their original containers. Do not mix with other waste. Handling dirty containers must be carried out in the same way as the product itself. An MSDS of the generated waste must be generated.

Differences in the action of large and small leaks: There is no differentiation.

7. - HANDLING AND STORAGE**Handling:**

Technical measures Using only in areas provided with adequate exhaust ventilation. Providing the product handling area with a set of emergency shower and eye wash. Handling must only be done with the indicated PPE and under safe conditions.

Prevention of worker's exposure: Avoiding the formation of vapors/aerosols. Working with exhaust / chimney. Do not inhale the substance/mixture. Using specific PPE's - splash goggles, face shield, PVC gloves and protective clothing. Avoid inhaling vapors.

Wash after handling and decontaminate PPE's after use. PPE's must be approved for use only with the respective CAs – Certificates of Approval.

Precautions and guidelines for safe handling: Use personal protective equipment (PPE) to avoid direct contact with the product. Handling the product in a well-ventilated place. Forms a slippery layer with water.

Storage:

Appropriate: Keep container tightly closed in a dry, cool and well-ventilated area. Keep in a cool, dry place in unopened original packaging. Avoid damp, wet and lightly wet conditions, temperature extremes and sources of ignition.

To avoid: Avoid extreme heat.

Hygiene measures:

Appropriate: Always sanitize your hands before handling any food, as there is a risk of food contamination.

Contaminated clothing must be washed and sanitized before use. Always keep gloves free from moisture and decontaminated.

Inappropriate: Direct contact with the product and/or its residues.

Technical measures

Suitable conditions: 25 and 50 kg bags:

The floor must be covered with pallets.

Storage is done with the rows approximately 30 cm apart from the walls and with a maximum height of 20 bags.

In bulk:

It must be done in covered warehouses, complying with the following criteria:

- Only dense ash should be stored in bulk;
- The floor must be dry and clean.

Big bags:

It must be waterproof, be on pallets, covered by canvas and with a maximum stacking of 01 (one) big bag.

Note: The quality of the product is directly linked to the state in which it is being stored, avoiding:

- Moisture;
- Torn packaging;
- Big bag with holes;
- Foreign objects on bulk packaging.

**LIGHT BARREL**

REVISION DATE: 09/15/2022

Safe materials for packaging:**Recommendations:** Original material.**8. - EXPOSURE CONTROLS AND PERSONAL PROTECTION****Parameters of specific control:****Occupational exposure limits:**

Occupational exposure limits: Not known.

Biological indicators: Not found.**Other limits and values:** N.A.**Measures of engineering control:** Environments where soda ash is handled must have good natural or mechanical ventilation when necessary to disperse suspended particles. Handling the product in a place with good natural or mechanical ventilation, in order to keep the concentration of vapors/dust below the tolerance limit. Provide mechanical ventilation and direct exhaust system to the outside environment. These measures help to reduce exposure to the product. It is recommended to make emergency showers and eye washes available in the work area. Engineering control measures are most effective in reducing product exposure.**Appropriate Personal Protective Equipment:****Eye/face protection**

Protective masks and safety glasses. Use tested and approved eye protection equipment in accordance with appropriate government regulations.

Skin protection:

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching the outer surface of the glove) to avoid skin contact with the product. Dispose of contaminated gloves after use.

Respiratory protection:

Use a semi-easy or full face covering air respirator. Use respirators and components tested and approved by government regulations.

Thermal hazards: Does not present thermal hazards

9. - PHYSICAL AND CHEMICAL PROPERTIES**Appearance:** Powder.**Color:** White.**Odor and odor limit:** Odorless

pH: 11.3 (1.0% solution (mass/volume).

Melting point: 851 °C.**Freezing point:** Not available.**Initial boiling point and boiling temperature range:** Not available.**Flash point:** Not available.**Evaporation rate:** Not available.**Flammability (solid):** Not available.**Lower/upper flammability or explosiveness limit:** Not available.**Vapor pressure:** Not available.**Vapor Density:** Not available.**Relative Density** 0.4 to 0.6 g/mL.**Solubility:** Soluble with release of heat.**Partition coefficient - n-octanol / water:** Not available.**Auto-ignition temperature:** Not available.**Decomposition temperature:** Not available.**Viscosity:** Not applicable.**10. - STABILITY AND REACTIVITY****Specific conditions:****Reactivity:** With water, it releases heat.**Chemical stability:** The product is stable under normal conditions. Reacts violently with acids releasing gas

**LIGHT BARREL**

REVISION DATE: 09/15/2022

carbon dioxide (CO₂).

Conditions to avoid: Contact with incompatible materials, humidity and high temperatures.

Materials or incompatible substances: It is incompatible with fluorine, aluminum, phosphorus pentoxide, acids, zinc, lithium. Reacts violently with acids, releasing heat and carbon dioxide (CO₂).

Hazardous decomposition products Carbon dioxide, carbon monoxide and sodium oxide.

11. - TOXICOLOGICAL INFORMATION

Information according to the different routes of exposure:

Acute toxicity: Not available.

Skin corrosion/irritation: Not available.

Severe ocular lesions/eye irritation: Not available. Respiratory or

Skin sensitization: Not available.

Germ cell mutagenicity: It has no mutagenic effect.

Carcinogenicity: It has no carcinogenic effect.

Reproductive toxicity: It has no toxic effect on reproduction.

Specific target organ toxicity- single exposure: Not available.

Specific target organ toxicity- repetitive exposure: Not available.

Aspiration hazard: Not available.

12. - ECOLOGICAL INFORMATION

Ash is not an aggressive or poisonous product for the environment, however, as it dissolves easily, its entry into the water course should be avoided, as it acts by increasing the local pH.

- Environmental effects, behaviors and impacts of the product:

Ecotoxicity: There is no information available.

Persistence and degradability: Soluble.

Bioaccumulative potential: There is no information available.

Mobility in soil: There is no information available.

Other adverse effects: Danger in drinking water supply if permitted due to entry into soil or aquifers. Harmful effect due to pH change. Although diluted, it forms toxic and corrosive mixtures with water. Additional information on ecology. Discharge into the environment must be avoided.

13. - CONSIDERATIONS ON FINAL DISPOSAL

Recommended methods for final disposal:

The treatment and disposal of product residues must be done in a suitable environment, by people trained in the use of special equipment and the recommended PPE's to avoid contact with the product, its vapors or mists. Leaks must be contained and collected for later disposal after neutralization.

Product:

Ensure all Federal, State and local agencies receive proper notice of spills and disposal methods. CONAMA Resolution 005/1993, Law No. 12,305, as of August 2, 2010 (National Solid Waste Policy).

Product waste:

Consult environmental regulatory agencies for advice on acceptable regulatory practices. Come in contact with relevant local authorities. It can be incinerated when in compliance with local regulations. Or dispose of in an approved chemical waste landfill.

Used Package:

Empty containers must be drained and covered before handling and transport operations. If the package is not properly washed and decontaminated, it is considered to contain the product.

14. - TRANSPORT INFORMATION

National and International Regulations

Land:

Resolution No. 5947/2021 of the Brazilian National Land Transport Agency (ANTT), Approves the Complementary Instructions to the Regulation of Land Transport of Dangerous Goods and its amendments.

**LIGHT BARREL**

REVISION DATE: 09/15/2022

UN number: Product not covered by current regulations on the transport of dangerous products.

Appropriate name for shipment: -

Risk class: -

Risk subclass: -

Risk number: -

Packing group: -

Waterway:

DPC – Directorate of Ports and Coasts (Transport in Brazilian waters) Maritime Authority Regulations (NORMAM)

NORMAM 01/DPC: Vessels Used in Open-seas Navigation

NU number: Product not covered by current regulations on the transport of dangerous products.

Appropriate name for shipment: -

Risk class: -

Risk subclass: -

Risk number: -

Packing group: -

- Air Transport:

ANAC - National Civil Aviation Agency - Resolution No. 129 as of January 8, 2009

RBAC N°175 - (BRAZILIAN CIVIL AVIATION REGULATION) - TRANSPORTATION OF DANGEROUS ITEMS IN CIVIL AIRCRAFT

IS No. 175-001 - SUPPLEMENTARY INSTRUCTION - IS

ICAO - "International Civil Aviation Organization" - Doc 9284-NA/905

IATA - "International Air Transport Association"

Dangerous Goods Regulation (DGR)

NU number: Product not covered by current regulations on the transport of dangerous products.

Appropriate name for shipment: -

Risk class: -

Risk subclass: -

Risk number: -

Packing group: -

15. - REGULATORY INFORMATION

Specific regulations for the chemical product:

Federal Decree No. 2,657, as of July 3, 1998;

Standard ABNT-NBR 14725:2014;

Ordinance No. 229, as of May 24, 2011 – Changes Regulatory Standard No. 26.

16. - OTHER INFORMATION

The information on this sheet corresponds to the current state of our knowledge and experience of the product and is not exhaustive. It applies to the product under the conditions specified, unless otherwise stated. In case of combinations or mixtures, make sure that no new danger can appear. This information does not, in any case, exempt the user of the product from complying with all legislative, regulatory and administrative texts relating to the product, safety, hygiene and protection of human and environmental health.

Bibliographical References:

AMERICAN CONFERENCE OF GOVERNMENTAL INDUSTRIALS HYGIENISTS. TLVs® and BEIs®: Based on "Documentation" of Occupational Exposure Limits (TLVs®) for Chemical Substances and Physical Agents & Biological Exposure Indices (BEIs®). Translation Brazilian Association of Occupational Hygienists. São Paulo, 2016.

BRAZIL. MINISTRY OF LABOR AND EMPLOYMENT (MTE). Regulatory Standard (NR) No. 7: Occupational Health Medical Control Program. Brasília, DF. Jun. 1978.

BRAZIL. MINISTRY OF LABOR AND EMPLOYMENT (MTE). Regulatory Standard (NR) No. 15: Unhealthy activities and operations. Brasília, DF. Jun. 1978.

US EPA. 2011. EPI Suite™ for Microsoft® Windows, v 4.10. United States: Environmental Protection Agency,



LIGHT BARREL

REVISION DATE: 09/15/2022

Washington. 2011. Available at:

< <http://www.epa.gov/oppt/exposure/pubs/episuite.htm>>. Access on: September, 2022

Globally Harmonized System of Classification and Labelling of Chemicals (GHS). 9. rev. United Nations, 2021.

HSDB - HAZARDOUS SUBSTANCES DATA BANK. Available at: <<http://toxnet.nlm.nih.gov/cgi-bin/sis/htmlgen?HSDB>>. Access on: September, 2022

IARC - INTERNATIONAL AGENCY FOR RESEARCH ON CANCER. Available at: <<http://monographs.iarc.fr/ENG/Classification/index.php>>. Access on: September, 2022

IPCS - INTERNATIONAL PROGRAMME ON CHEMICAL SAFETY- INCHEM. Available at: <<http://www.inchem.org/>>. Access on: September, 2022

IUCLID - INTERNATIONAL UNIFORM CHEMICAL INFORMATION DATABASE. [S.I.]: European chemical Bureau. Available at: <<http://ecb.irc.ec.europa.eu>>. Access on: September, 2022

NIOSH - NATIONAL INSTITUTE OF OCCUPATIONAL AND SAFETY. International Chemical Safety Cards. Available at: <<http://www.cdc.gov/niosh/>>. Access on: September, 2022

NITE-GHS JAPAN - NATIONAL INSTITUTE OF TECHNOLOGY AND EVALUATION. Available at: <http://www.safe.nite.go.jp/english/ghs_index.html>. Access on: September, 2022

U.S. ENVIRONMENTAL PROTECTION AGENCY. ECOSAR - Ecological Structure-Activity Relationships. Version 1.11 Available at: <<http://www.epa.gov/oppt/newchems/tools/21ecosar.htm>>. Access on: September, 2022