

**COCAMIDOPROPYL BETAINE**

REVISION DATE: 09/20/2022

1. - PRODUCT AND COMPANY IDENTIFICATION**Product name:** COCAMIDOPROPYL BETAINE**Internal Code of product identification:****Company name:** USQUÍMICA 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: Industrial use.

2. - HAZARDS IDENTIFICATION**Classification of Substance:**

Skin corrosion/irritation - Category 2

Serious eye damage/eye irritation - Category 2

Adverse effects on human health:

Causes irritation to the skin.


Environmental effects:

It can contaminate water courses or springs, in case of spillage, making them unfit for consumption for any purpose.

Emergency overview:

Depending on the proportions isolate and evacuate the area. In case of leakage and/or spillage, try to block the leakage, contain the spilled liquid or transfer the product. During emergency care, keep the wind blowing your back. Access by people to contaminated areas should only be allowed if they are wearing specific clothing and adequate respiratory protection.

GHS label elements, including precautionary phrases:

LABEL ELEMENTS	DATA
Product identification and supplier emergency telephone number.	Commercial Name: COCAMIDOPROPYL BETAINE Emergency phone: SUATRANS - COTEC - Environmental Emergency. DDG (0800) 0111-767 - (0800) 7071-767 - 24 HOURS.
Hazard pictograms.	
Warning words.	ATTENTION
Danger phrases.	H315: H315 - Causes irritation to the skin
Frases de precaução.	P260 - Do not inhale dust/fume/gas/mist/vapors/spray. P264 - Wash skin thoroughly after handling. P272 - Contaminated work clothing must not leave the workplace. P280 - Use eye protection/face protection. P280 - Use protective gloves. P302 + P352 IN CASE OF SKIN CONTACT: Wash with plenty of water. P305 + P351 + P338 - 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. P333 + P313 In case of irritation or skin rash: Consult a physician. P337+P313 - If eye irritation persists: consult a physician.

**COCAMIDOPROPYL BETAINE**

REVISION DATE: : 09/20/2022

	P362 + P364 Remove all contaminated clothing and wash it before using it again. P501: Dispose of contents/container to an approved waste disposal facility.
--	---

Other hazards which do not result in classification: No information found.

3. - COMPOSITION AND INFORMATION ON THE INGREDIENTS**Prepared****Chemical Name:** fatty acid diethanolamine**Chemistry nature:** Surfactant**Common chemical or generic name:** Coco Starch Propyl Betaine, Coco Betaine, Cocobetaine, Betaine

CAS Number: 61789-40-0

Molecular Formula: C₁₉H₃₈N₂O₃**Molecular Weight:** 342.52**Concentration (%)** 28 - 30%**EINECS:** 263-058-8**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 and soap. 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:** Never give anything by mouth to an unconscious person. If a large amount of this substance is ingested, refer immediately to a doctor.**What actions must be avoided:** 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: Large amounts can cause digestive system disorders such as irritation, nausea and diarrhea.

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. In case of contact with the skin and/or eyes, do not rub the affected parts. If necessary, symptomatic treatment should include, above all, supportive measures such as correction of hydroelectrolytic, metabolic disorders, as well as respiratory assistance.**5. - FIREFIGHTING MEASURES****Suitable extinguishing measures:** For fire fighting, foam, chemical powder, carbon dioxide (CO₂), water fog can be used.**Inappropriate extinguishing measures:** Waterjet.**Specific hazards:** Combustion of the chemical or its packaging can form irritating and toxic gases such as carbon monoxide and carbon dioxide. No specific product-related hazards are expected during fire.**Additional indications:** Water must not be directed directly on the burning product, as it may spread and increase the intensity of the fire.**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.

**COCAMIDOPROPYL BETAINE**

REVISION DATE: 09/20/2022

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 great, it is recommended to use a protective mask with a filter against vapors or mists.

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: Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Keep in suitable closed containers until disposal.

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 waste must be generated.

Differences in the action of large and small leaks: For small quantities it can be an inert absorbent material; large quantities must be backfilled with earth, sand or other inert material. The product must be collected in suitable containers, properly identified, for later disposal. Washing the area with plenty of water, which must also be collected for disposal. Collecting contaminated soil.

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 alkaline 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.

Persons susceptible to skin sensitization problems or asthma, allergies, chronic or recurrent respiratory illnesses, should not work in processes that use this preparation.

Dangerous container when empty.

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. Do not mix or store the product in contact with incompatible materials.

Storage:

Appropriate: Keep container tightly closed in a dry, cool and well-ventilated area. Keep in a cool, dry place in unopened original packaging. As it is a hygroscopic product, the possibility of contact with moisture must be minimized. In tanks it is recommended to maintain an inert gas atmosphere. 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: Keep containers closed and in a well-ventilated place. Keep containers away from heat and direct sunlight. Avoid extreme temperatures. Avoid moisture.

**COCAMIDOPROPYL BETAINE**

REVISION DATE: 09/20/2022

Safe materials for packaging:**Recommendations:** Similar to the original packaging.**Further information:** Protect from extreme cold, heat and sunlight.**8. - EXPOSURE CONTROLS AND PERSONAL PROTECTION****Parameters of specific control:****Components with parameters to be controlled in the workplace:****TLV-TWA (ACGIH):** Coconut fatty acid diethanolamide: not established;**PEL-TWA (OSHA):** Coconut fatty acid diethanolamide: not established;**TLV-STEL (ACGIH):** Cocamide DEA: Not established;

Measures of engineering control: 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:

Respiratory protection: If there is a possibility of contact with mists or vapors from the heated product, use self-contained air or forced air masks.

Hand protection: PVC gloves. Leather gloves are not recommended.

Protection for the eyes/face: Safety glasses for chemicals.

Skin protection: PVC apron and boots.

Hygiene measures: Hands and face should be washed before breaks and at the end of the shift. Remove immediately all contaminated clothing. Wash contaminated clothing before reuse.

9. - PHYSICAL AND CHEMICAL PROPERTIES**Appearance**

(physical state, shape, color): Liquid, slightly yellowish.

Odor: Smooth and characteristic.

pH: 5.0-8.0.

Melting point / freezing point: < - 5°C.

Initial boiling point and boiling temperature range: > 100°C.

Flash point: > 100°C (open vessel).

Evaporation rate: Not available.

Flammability (solid, gas): Not flammable.

Lower/upper flammability or explosiveness limit: Not explosive.

Vapor pressure: Low because of its high boiling point.

Vapor Density: Not available.

Relative Density Approx. 1,5 g/cm³ to 20°C.

Solubility: Soluble in water.

Partition coefficient - n-octanol / water: Not available.

Auto-ignition temperature: Not applicable.

Decomposition temperature: Not available.

Viscosity: Maximum 100 (mPa.s).

Distillation range : Not available.

10. - STABILITY AND REACTIVITY**Specific conditions:**

Reactivity: Does not decompose if stored and used according to instructions. Hazardous polymerization will not occur.

Chemical stability: Stable under recommended storage conditions.

Possibility of hazardous reactions: They are not known.

Conditions to avoid: High temperatures and ignition sources.



COCAMIDOPROPYL BETAINE

REVISION DATE: 09/20/2022

Incompatible materials: Strong acids and oxidizers.

Hazardous decomposition products Combustion of the chemical or its packaging can form irritating and toxic gases such as carbon monoxide and carbon dioxide.

11. - TOXICOLOGICAL INFORMATION

Information according to the different routes of exposure:

Acute toxicity

The product is not expected to present acute toxicity.

Skin corrosion/irritation.

The product is not expected to cause corrosion/irritation.

Severe ocular lesions/eye irritation:

The product is not expected to cause serious eye damage.

Respiratory or skin sensitization

The product is not expected to cause respiratory or skin sensitization.

Germ cell mutagenicity

Not classified based on available information.

Carcinogenicity

Not classified based on available information.

Reproductive toxicity

Not classified based on available information.

Specific target organ toxicity - single exposure

The product is not expected to exhibit specific target organ toxicity - single exposure.

Specific target organ toxicity - repeated exposure

The product is not expected to present specific target organ toxicity – repeated exposure.

Aspiration hazard:

The product is not expected to present an aspiration hazard.

Additional Information

Product: Notes: Data not available

12. - ECOLOGICAL INFORMATION

- Environmental effects, behaviors and impacts of the product:

Ecotoxicity:

Species: Fish bacteria

Analysis: LC50 EC50

Result: 1-10 mg / L > 1000 mg / L

Persistence and degradability Product / Ingredient Aquatic half-life Photolysis Biodegradability coconut starch - Readily cocamidopropyl

Persistence and degradability:

The product is completely biodegradable in the environment.

Bioaccumulative potential:

It is not expected to bioaccumulate. Its toxicity to aquatic organisms is not known.

Mobility in soil:

Volatilization from surface water or soil is not expected.

Other adverse effects:

Solubility: Soluble in water.

Product:

Ecological additional information: Environmental risk cannot be excluded in case of unprofessional handling or disposal

**COCAMIDOPROPYL BETAINE**

REVISION DATE: 09/20/2022

harmful to aquatic The organisms, with prolonged effects.

13. - CONSIDERATIONS ABOUT TREATMENT AND 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.

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

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: -

- 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)

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: -

**COCAMIDOPROPYL BETAINE**

REVISION DATE: 09/20/2022

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 INDUSTRIAL 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, 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.l.]: 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