1. PRODUCT AND COMPANY IDENTIFICATION

Product name: AMIDE 90
Internal Code of product identification:
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: Industrial use.

2. HAZARDS IDENTIFICATION

Classification of Substance:
Corrosive/irritating to the skin - Category 2
Serious eye damage / eye irritation - Category 1
Toxicity to specific target organs - Repeated Exposure - Category 2

Adverse effects on human health:
Causes irritation to the skin. Causes serious eye damage.
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: AMIDE 90 Emergency phone: SUATRANS - COTEC - Environmental Emergency. DDG (0800) 0111-767 - (0800) 7071-767 - 24 HOURS.
Hazard pictograms.	
Warning words.	**DANGER**
Danger phrases.	H315: H315 - Causes irritation to the skin H318: Causes serious eye damage H373: May cause damage to organs (blood, kidney, liver) by repeated or prolonged oral exposure.
Precautionary phrases.	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. 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 ABOUT INGREDIENTS

Prepared
Chemistry nature: Fatty acid alkanolamines.
Common chemical or generic name: Coconut Diethanolamide 90

Impurities that contribute to the danger:

Ingredients	CAS number	Concentration (%)
Coconut fatty acid Cocamide DEA	68603-42-9	>90% by weight
diethanolamine	111-42-2	< 5% by weight
Methanol	67-56-1	1% by weight
Glycerin	56-81-5	Approximately 1.5% by weight

4. FIRST AID MEASURE

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: Inhalation: There is no history of problems caused by inhalation of the product in humans. However, vapors from liquid at elevated temperatures or product mist at high concentrations are likely to be irritating to the respiratory tract. Skin: May cause moderate to severe irritation. Prolonged or repeated exposures can cause allergic reactions and dermatitis. Diethanolamide can be absorbed through the skin in toxic amounts. Eyes: May cause moderate to severe irritation. Ingestion: May cause irritation of mouth, pharynx and esophagus. 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 hydro electrolytic, metabolic disorders, as well as respiratory assistance.

5. FIRE FIGHTING MEASURES

Suitable extinguishing measures: The product is difficult to burn, but it can burn or decompose if it is involved in flames from other products. For combat, alcohol resistant foam, water mist, CO2 or dry chemical can be used.
Inappropriate extinguishing measures: Waterjet.
Specific hazards: Burning or decomposition of the product may produce toxic fumes containing carbon monoxide.

carbon and nitrogen oxides, in addition to CO2.
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 firefighting water.

6. MEASURES OF CONTROL FOR ACCIDENTAL SPILLS OR LEAKAGE

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.
Safe materials for packaging:
Recommendations: Similar to the original packaging.
Further information: Protect from extreme cold, heat and sunlight.

8. EXPOSURE CONTROL 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; Diethanolamine: 2 mg/m3 (can be absorbed through the skin); Methanol: 200 ppm; Glycerin (mist): 10 mg/m3 [Ref. 3].
PEL-TWA (OSHA): Coconut fatty acid diethanolamide: not established; Diethanolamine: 3 ppm [Ref. 1].
TLV-STEL (ACGIH): Coconut fatty acid diethanolamide, Cocamide DEA: Not established; 250 ppm methanol [Ref. 3].

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

Aspect (physical state, shape and color):
Yellowish viscous liquid.
Odor: Not available
pH: 1% by weight aqueous solution at 25°C: 9.0 a 11.0.
Melting point / freezing point: < - 0.5°C
Initial boiling point and boiling temperature range: > 200ºC
Flash point: 180ºC
Evaporation rate: Not available
Flammability (solid, gas): Not flammable.
Lower/upper flammability or explosiveness limit: Not explosive
Vapor pressure: < 0.13 kPa at 20°C
Steam density: Not available
Relative density: 970 kg/m3 at 25°C
Solubility: Partial in water; soluble in ethanol at 25°C
Participation Coefficient - n-octanol/water: Not available
Auto-ignition temperature: Not applicable
Decomposition temperature: Not available
Viscosity: Approximately 470 mPa.s at 25°C

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: Nitrites or other nitrosating agents can react with diethanolamine to form nitrosamines, which have shown carcinogenic and mutagenic activity in animal tests.
Conditions to avoid: High temperatures and sources of ignition and prolonged contact with air.
Incompatible materials: Strong oxidizers and compounds with high affinity for hydroxyl groups.
Hazardous decomposition products Carbon monoxide and toxic fumes containing nitrogen oxides in addition to CO2.

11. TOXICOLOGICAL INFORMATION

Information according to the different routes of exposure:
Acute toxicity
Dermal: Intermittently tested on the skin of rats for up to 14 weeks, coconut fatty acid diethanolamide proved to be irritating in rats at doses above 100mg/kg
Oral: Cocamide DEA: moderately toxic. DL50, rat: 2700mg/kg; Diethanolamine: toxic: DL50, rat: 700mg/kg; LD50, rat: 330mg/kg. Methanol and glycerin are slightly toxic (LD50, rats > 5000mg/kg)

Skin corrosion/irritation.
H315 - Causes irritation to the skin

Severe ocular lesions/eye irritation:
Causes 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
May cause damage to organs (blood, kidney, liver) by repeated or prolonged oral exposure.

Aspiration hazard:
The product is not expected to present an aspiration hazard.

Additional Information
Product: Comments: Data not available

12. TOXICOLOGICAL INFORMATION

- Environmental effects, behaviors and impacts of the product:
Ecotoxicity:
The product is not expected to be carcinogenic.

Persistence and degradability:
The product is completely biodegradable in the environment. BOD5 (estimated): > 60% of theoretical

Bio accumulative 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: Partial in water; soluble in ethanol at 25°C

Product:
Ecological additional information: Environmental risk cannot be excluded in case of unprofessional handling or disposal. harmful to aquatic The organisms, with prolonged effects.

13. - CONSIDERATIONS ABOUT THE 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 Terrestrial Regulations:
Resolution No. 5232 as of December 14, 2016 of the Brazilian National Land Transport Agency (ANTT), *Approves the Supplementary Instructions to the Land Transport of Dangerous Goods Regulations and their 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: -

15. - REGULATIONS 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" dos Limites de Exposição Ocupacional (TLVs®) para Substâncias Químicas e Agentes Físicos & Índices Biológicos de Exposição (BEIs®). Tradução Associação Brasileira de Higienistas Ocupacionais. São Paulo, 2016.

BRAZIL. MINISTÉRIO DO TRABALHO E EMPREGO (MTE). Regulatory Standard (NR) No. 7: Occupational Health Medical Control Program. Brasília, DF. Jun. 1978.

BRAZIL. MINISTÉRIO DO TRABALHO E EMPREGO (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: October , 2019.

Globally Harmonized System of Classification and Labelling of Chemicals (GHS). 7. rev. United Nations, 2017.

HSDB – HAZARDOUS SUBSTANCES DATA BANK. Available at: <http://toxnet.nlm.nih.gov/cgi-bin/sis/htmlgen?HSDB>. Access on: October , 2019.

IARC – INTERNATIONAL AGENCY FOR RESEARCH ON CANCER. Available at: <http://monographs.iarc.fr/ENG/Classification/index.php>. Access on: October , 2019.

IPCS – INTERNATIONAL PROGRAMME ON CHEMICAL SAFETY – INCHEM. Available at: <http://www.inchem.org/>. Access on: October , 2019.

IUCLID – INTERNATIONAL UNIFORM CHEMICAL INFORMATION DATABASE. [S.l.]: European chemical Bureau. Available at: <http://ecb.jrc.ec.europa.eu>. Access on: October , 2019.

NIOSH – NATIONAL INSTITUTE OF OCCUPATIONAL AND SAFETY. International Chemical Safety Cards. Available at: <http://www.cdc.gov/niosh/>. Access on: October , 2019.

NITE-GHS JAPAN – NATIONAL INSTITUTE OF TECHNOLOGY AND EVALUATION. Available at: <http://www.safe.nite.go.jp/english/ghs_index.html>. Access on: October , 2019.

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: October , 2019.