









Nome do Produto: ACIDO CITRICO LIQUIDO

Revisão: 0 Data: 12/09/2016 Página 1/5

1 - Identificação

Nome do Produto: ACIDO CITRICO LIQUIDO

Número da FDS: 445

Comercializado por: Morais de Castro Comércio e Importação de Produtos Químicos Ltda. Endereço: Rua Álvaro Gomes de Castro, 512 - Porto Seco Pirajá 41233-005 Salvador BA

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1.1-Outras maneiras de identificação:

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

2 - Identificação de perigos

Classification of the substance:

Causes serious eye erritation - Category 2A Skin irritation - Category 3 Acute dermal toxicity - Category 5

Classification in accordance with:

Standard ABNT-NBR 14725-2:2009 - Issue 2:2010; Global Harmonization Standard (GHS), ONU.

Hazards not otherwise classified or not covered:

None.

GHS Label elements

Pictogramas:



Signal word:

WARNING

Hazard statement:

H313: It can be dangerous in contact with skin.

H316: Causes mild skin irritation.

H319: Causes serius eye irritation.

Precautionary statement (s):

P264: Wash skin thrroughly after handling.

P280: Wqar protective gloves / eye protection / face protection.

P305 + P351 + P338:IF IN EYES: Rinse cautiously with watwe for several minutes. Remove contact lenses, if present and easy to do, Continue rinsig.











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3 - Composição e Informações sobre os ingredientes

Substances

Chemical name Citric Acid Anhydrous

Synonyms: 2 - Hydroxy - 1,2,3 propanetricarboxylic acid

CAS Nº: 77-92-9 CE Nº: 201 - 069 - 1

MOLECULAR WEIGHT: 192, 12 G/MOL

Formula: C6H807 (HILL); (HOOCCH2) 2 C (OH) COOH

Impurities wich contributes with hazards: None

4 - Medidas de primeiros-socorros

Inhalation:

Move person to fresh air and keep in a position comfortable for breathing. If not breathing, give oxygen. Give artificial respiration if the victim is not breathing. If you feel unwell, contact a TOXICOLOGICAL INFORMATION CENTER or physician. Take with you this SDS.

Skin contact:

Remove contaminated clothes and shoes. Wash with plenty of water to remove the material at least 20 minutes. Wash clothes before reuse. In case of skin irritation, get medical attention. Take with you this SDS.

Eve contact:

Rinse thoroughly with plenty of water. Never give anything by mouth to an unconscius person. If you feel unwell, contact a TOXICOLOGICAL INFORMATION CENTER or physician. Take with you this SDS.

Most important symptoms and effests:

Is irritanting to the skin. Is irritanting to the the eyes resulting in stinging, reddening and tearing. May be harmful if swallowed, adsorbed through skin or inhaled. Ingestion or absorption may cause nausea, vomiting and diarrhea. In higt dosses may cause mild irritation of the respiratory tract with coughing and sneezing.

Indication to any immediate medical attention:

Avoid contact with the product while helping the victim. If necessary, symptomatic treatment should include, above all, support measures to correct eletrolyte disturbances, metabolic, and respiratory care. In case of contact with the product do not rub the affected site.

5 - Medidas de combate a incêndio

xtinguishing media:

Suitable extinguishing media: Water, water apray, dry powder, foam, carbin dioxide (CO²). Extinguishing media which must not be used: Water jet. May cause explosive dust conditions

Special hazards arising:

The combustion of these product or its packaging can form irritating and toxic gases as carbon monoxide and dioxide carbon.

Advice for firefighters

Wear self contained breathing apparatus 9 SCBA) for fire fighting if necessary.

Containers and tanks involved in the fire should be cooled with water fog.

6 - Medidas de controle para derramamento ou vazamento

Personal precautions, protective equipment and emergency procedures.

Avoid ingestion and inhalation of the product and also the contact with eyes and skin. Evacuate personnel to safe areas. Wear rubber gloves or vinyl and safety glasses.

Environmental precautions

Isolate the scene. Prevent spillage. Do not allow the product enter water systems or sewage.

Cleaning Methods

When there is leakage, collect the spilled product for subsequent disposal and rinse the area with water.

7 - Manuseio e armazenamento

Technical measures/precautions:

Precautions for safe handling Handle in a ventilated area or area with ventilation / exhaust system. Avoid dust and mists formations. Avoid exposure to product. Avoid contact with incompatible materials. Use personal protective equipment as described in Section 8.

Hyguene measures:Wash your hands and face thoroughly after handling and before eating, drinking, smoking or using the toilet. Clothes contaminated shold be changed and washed before reuse. Remove clothing and protective equipament











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contaminated before entering areas.

<u>Conditions for safe storage, including any incompatibilities</u>

Fire and explosion prevention: In is not expected that the product presents a danger of fire or explosion.

Appropriate conditions: Store in a dry well-ventilated place and away from sunlight. Keep container closed. Keep on pallets. Keep store at room temperature not exceeding 35C°. Keep away materials incomoatible. It is not necessary the addition of

stabilizers and antioxidants to ensure product durability.

Packaging materuals: Multiwall paper bag with internal liner of HPDE. Bulk Bag 500 and 1000 kg in plypropylene

8 - Controle de exposição e proteção individual

Control Parameters

Components with worplace control parameters

Contains no substances with ocupational exposure limit values

Biological Indicators No data available

Apprropriate engineering controls

Use local exhaust ventilation. These measures help in reducing exposure to product. Keep the atmospheric concentrations of the constituents of the product, below the recommended exposure limits.

Personal protective equipment

Eye / Face protection

Safety glasses

Skin protection

Rubber or vinyl goggles. Appropriate clothers and safety shoes.

Respiratory protection

In case of leakage, where exposure is great, it recommends the use of, respiratory protection, mask with half face filter against dusts and mists

Thermal Hazards

Not applicable.

9 - Propriedades físicas e químicas

Appearance: Clear liquid Odor: Light sweet odor

pH: Acid

Melting point/freezing point: Not available Initial boiling point and boiling range: 104°C Flash Point: Not applicable not flammable product.

Auto temperature - Ignition: Not available .

Flammability: Note applicable

Lower Explosive Limit: Not Available

Upper

Explosive Limit: Not Available vapor pressure: 16 mmHg at 20 ° C Vapor density: 0.62 (Air = 1)

Density (20 ° C) 1.24 25 ° C

Solubility: Completely soluble in water.

Viscosity: Not Available

Evaporation Rate: Not Available

Partition coefficient - n- octanol / water: Not Available

Decomposition temperature: Not Available

10 - Estabilidade e reatividade

Stability and reactivity: Stable under normal conditions of temperature and pressure Possibility of hazardous reactions: No data available.

Conditions to avoid:

Higt temperatures, umidity and contact with incompatible materialsIncompatible materials: Oxidizing agents, Bases, Reducing agents.

Hazardous decomposition products:

Carbon oxides











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11 - Informações toxicológicas

Acute toxicity:

Product not classified as acute toxic by oral and dermal route. It is not expected thar the product has acute toxicity by inhalation

DL 50 (oral, rat): > 5000,0 mg/kg DL 50(dermal, rat): > 2000,0 mg/kg Skin corrosion/Irritation:

Mild skin irritation in rabbit (test 404, OECD)

Serious eye demage/eye irritation:

Irritation to eyes with stinging, reddening and tearing. Irritation eyes in rabbits: (test guideline 405, OECD)

Respiratory or skin sensitisation:

It's not expected that the product has germ cell mutagenicity.

Studies in rats were negative for reproductive toxicity

Specific target organ toxicity - single exposure

May be harmful if swallowed, adsorbed through skin or inhaled. Igestion or absorption may cause nausea, vomiting and diarrhea. In high doses can cause mild irritation of the respiratory tract coughing and sneezing

Specific target organ toxicity - repeated exposure

It's not expected that the product present specific targer orang toxicity - reapeated exposure

Aspiration hazard:

It's not expectated that the product present aspiration hazard

12 - Informações ecológicas

Environmental effects, behavior and impacts of product

Toxicity:

Toxic only in large concentrations, and their effects are readily broken in the presence of a large volume of water.

CE50 (crustaceans, 48h): > 100,0 mg/L

Persistence and degradability:

The product does not have persistence and is considered readily biodegradable. Degradability rate: 97% in 28 days.

Bioaccumulative potential:

It has a low potential bioaccumulation in aquatic organisms.

BCF:3.2 Log Kow: - 1.64

Mobility in soil:

It is expected high mobility in soil.

Koc:3 1

Others adverse effects

No data available

13 - Considerações sobre destinação final

Waste treatment methods

Product

Cover with soda ash. Can be collected in plastics containers. Waste disposal shoul be in accordance with existing federal, federal, state and local environmental control regulations: Lei nº 12.305, de 2 de agosto de 2010 (Política nacional de Resíduos Sólidos).

Product residues

Keep the product in its original packing. They should be washed with large volumes of water. Disposal should be in accordance with the established for the product.

Contaminated packaging

Do not reuse empty containers. These may contain residues of the product and shold be kept closed and forwarded to proper disposal as required for the product.

14 - Informações sobre transporte

International and National Regulations:

Land transportation:

Resolution nº420, February 12, 2004 from Agencia nacional de Transporte terrste (ANTT) approves Instructions Complementary to the Regulation of Land Transport of Dangerous Goods and its modifications

Water carriage:

DPC - Diretoria de Portos e Costas (Transporte em águas brasileiras)

Normas de Autoridade Marítima (NORMAM)

NORMAM 01/DPC: Embarcações Empregadas na Navegação de Mar Aberto











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NORMAM 02/DPC: Embarcações Empregadas na Navegação Interior IMO - " International Maritime Organization" (Organização Marítima Internacional) International Maritime Danguerous Goods Code (IMDG Code)

Air service:

ANAC - Agência nacional de Aviação Civil - Resolução nº 129 de 08 de desembro de 2009 RBAC №175 - (REGULAMENTO BRASILEIRO DA AVIAÇÃO COVIL) - TRANSPORTE DE ARTIGOS PERIGOSOS EM AERONAVES CIVIS

IS Nº 175-001 - INSTRUÇÃO SUPLEMENTAR - IS ICAO - "International Civil Aviation Organization" (Organização da Aviação Civil Internacional) - Doc 9284-NA/905 IATA - "International Air Transport Association" (Associação Internacional de Transporte Aéreo)

Dangerous Goods Regulation (DGR)

ONU Classification number:

Nor classified as dangerous for transport

15 - Informações sobre regulamentações

Decreto Feeral nº 2.657, de 3 de julho de 1998;

Norma ABNT-NBR 14725:2014;

Portaria nº 229, de 24 de maio de 2011 - Altera a Norma Regulamentadora nº 26.

16 - Outras Informações

Others classifications of the substance:

The information in this SDS is collected from realiable sources. However, the informations is provided without any warranty, expressed or implied. The conditions or methods of handling, storage, use or disposal of the product might be beyond our control and knowledge. For the avoidance of doubt, we shall in no such circumstances be inder any liability in respect of loss, damage or expenses arising from handling, store, use or disposal of the product by your company and/oryour subcontractors. this FISPQ is only applicable for the product mentioned in the identification chapter and title. If the product is used as a componet in another product, this FISPQ may not be applicable to the composite material. SDS was created in, July 2015.

Subtitles and Abbreviations:

BCF - Bioconcentration Factor

CAS - Chemical Abstracts Service

CE - Europeam Commision

CE50- Effedtive concentration 50%

DL50- Lethal Dose 50%

Koc - Organic Carbon Absorption (Coefficient).

LEI - Lower Flammability

LES - Upper Flammability

OECD - Organisation for Economic Co-opertion and Development

ONU - United Nations

SCBA - Self-contained Breathing Apparatus