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# ReAgent

## SAFETY DATA SHEET CITRIC ACID ANHYDROUS TECH

According to Regulation (EC) No 1907/2006

### 1 IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

|                     |  |
|---------------------|--|
| PRODUCT NAME        | CITRIC ACID ANHYDROUS TECH   |
| CAS-No.             | 77-92-9  |
| EU INDEX NO.        | - - -  |
| EC No.              | 201-069-1  |
| SUPPLIER            | Reagent Chemical Services<br>18 Aston Fields Road<br>Whitehouse Industrial Estate<br>Runcom<br>Cheshire WA7 3DL<br>T: 01928 716903<br>F: 01928 716425<br>E: <a href="mailto:info@reagent.co.uk">info@reagent.co.uk</a> |
| PRODUCT NO.         | 2673   |
| APPLICATION         | General chemical reagent   |
| EMERGENCY TELEPHONE | Emergency Telephone : +44 (0) 1928 716903 Between 08.30 - 17.00  |
| USER ADDED SDS TEXT |  |

### 2 HAZARDS IDENTIFICATION

#### HAZARD ID

Irritating to eyes.

Xi;R36.

Although not classified as harmful to the environment the substance should not be discharged to land or water systems, this may have an impact on the organisms in the local area. The product is water soluble and will spread in water systems. The substance may produce a local pH change in water systems which could affect aquatic organisms.

The substance is not classified as flammable but is combustible and would burn in the event of a fire. There is a danger of dust explosion.

The substance is not classified according to annex I of Directive 67/548/EEC and Annex VI of the CLP Regulation but is irritating to eyes. Possible skin irritation on prolonged contact. See section 11 for additional information on health hazards.

### 3 COMPOSITION/INFORMATION ON INGREDIENTS

|              |           |
|--------------|-----------|
| EU INDEX NO. | - - -     |
| EC No.       | 201-069-1 |
| CAS-No.      | 77-92-9   |

#### COMPOSITION COMMENTS

Free flowing citric acid in powder or granular form.

### 4 FIRST-AID MEASURES

#### GENERAL INFORMATION

CAUTION! First aid personnel must be aware of own risk during rescue! Always consider any dangers in the vicinity before approaching to treat the casualty. First aid personnel must protect themselves with all necessary personal protective equipment during the assistance of casualties. When breathing is difficult, properly trained personnel may assist the casualty by administering oxygen. Place unconscious person on the side in the recovery position and ensure breathing can take place. Never give anything by mouth to an unconscious person. If other hazardous materials are involved in the incident avoid mouth to mouth contact, use a mechanical device such as a bag and mask. If medical assistance is needed take as much detail as possible about the incident and hazardous materials involved with the casualty.

#### INHALATION

Remove victim immediately from source of exposure. Provide rest, warmth and fresh air. Get medical attention if any discomfort continues.

#### INGESTION

Immediately rinse mouth and drink plenty of water. Get medical attention immediately!

## CITRIC ACID ANHYDROUS TECH

### SKIN CONTACT

Immediately remove contaminated clothing. Wash the skin immediately with soap and water. In serious cases obtain medical attention.

### EYE CONTACT

Promptly wash eyes with plenty of water or eye wash solution while lifting the eyelids. If possible remove any contact lenses and continue to wash. Get medical attention if any discomfort continues.

## 5 FIRE-FIGHTING MEASURES

### EXTINGUISHING MEDIA

Combustible. Water spray, foam, dry powder or carbon dioxide.

### SPECIAL FIRE FIGHTING PROCEDURES

Prevent run-off from entering drains and watercourses.

### UNUSUAL FIRE & EXPLOSION HAZARDS

Dust may form explosive mixture with air.

### SPECIFIC HAZARDS

In case of fire, toxic fumes or vapours may be formed. Carbon monoxide (CO). Carbon dioxide (CO<sub>2</sub>).

### PROTECTIVE MEASURES IN FIRE

Self contained breathing apparatus and full protective clothing must be worn in case of fire.

## 6 ACCIDENTAL RELEASE MEASURES

### PERSONAL PRECAUTIONS

Wear protective clothing as described in Section 8 of this safety data sheet. Avoid contact with skin and eyes.

### ENVIRONMENTAL PRECAUTIONS

Clean up any spillages immediately, prevent material from spreading and entering drains or sewage systems. Avoid unauthorised discharge to the environment. Large spillages or uncontrolled discharge to water systems must be alerted to the Environmental Agency or other regulatory body. If spillages to land cannot be treated safely or if contamination will occur the Environment Agency must be alerted immediately.

### SPILL CLEAN UP METHODS

Avoid dust formation. Collect with scoop or shovel if possible to do so safely, otherwise mix with sand or other inert material. Collect spillage in containers, seal securely and deliver for disposal according to local regulations. Containers with collected spillage must be properly labelled with correct contents and hazard symbol. Flush area clean with lots of water. Be aware of potential for surfaces to become slippery. Ventilate area and allow to dry before allowing access.

## 7 HANDLING AND STORAGE

### USAGE PRECAUTIONS

Avoid inhalation and spreading of dusts. Avoid contact with skin and eyes. Do not eat, drink or smoke when handling.

### STORAGE PRECAUTIONS

Store in closed original container at temperatures between 15°C and 25°C. Store away from heat, direct sunlight and moisture. Store above freezing. Store away from incompatible materials.

### STORAGE CLASS

Chemical storage.

## 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

### ENGINEERING MEASURES

Provide adequate ventilation and appropriate extraction to avoid occupational exposure. Work in a flameproof fume cupboard if dusts are generated.

### RESPIRATORY EQUIPMENT

Wear suitable dust respirator when dusts are generated. Consult with the supplier as to the compatibility of the equipment with the chemical of concern. CAUTION: Air purifying respirators do not protect the user in oxygen deficient atmospheres, use air supplied system.

### HAND PROTECTION

Wear protective gloves. Rubber or plastic

### EYE PROTECTION

Wear approved safety goggles.

### OTHER PROTECTION

Wear suitable protective clothing as protection against splashing or contamination. Provide eyewash station and safety shower. Wear plastic apron and full length gloves if handling large amounts.

**CITRIC ACID ANHYDROUS TECH****HYGIENE MEASURES**

Wash at the end of each work shift and before eating, smoking and using the toilet. Promptly remove any clothing that becomes contaminated. Wash promptly if skin becomes contaminated. When using do not eat, drink or smoke.

**9 PHYSICAL AND CHEMICAL PROPERTIES**

|   |   |   |       |
|---|---|---|-------|
| APPEARANCE                                      | Solid   |   |       |
| COLOUR  | White   |   |       |
| ODOUR   | Odourless   |   |       |
| SOLUBILITY                                      | Soluble in water.   |   |       |
| MELTING POINT (°C)                              | 153   | RELATIVE DENSITY                        | 1.66  |
| BULK DENSITY                                    | 500 - 950 kg/m <sup>3</sup>                                 | pH-VALUE, DILUTED SOLUTION              | 1.8 5 |
| AUTO IGNITION TEMPERATURE (°C)                  | 345   | PARTITION COEFFICIENT (N-Octanol/Water) | -1.72 |
| SOLUBILITY VALUE (g/100g H <sub>2</sub> O@20°C) | Minimum of 56g (Quoted values vary up to a maximum of 163g) |   |       |

**10 STABILITY AND REACTIVITY****STABILITY**

Stable under normal temperature conditions.

**CONDITIONS TO AVOID**

Avoid heat, direct sunlight and moisture. Avoid storage with incompatible materials.

**MATERIALS TO AVOID**

Oxidising agents. Bases. The possibility of reaction with other materials cannot be excluded.

**HAZARDOUS DECOMPOSITION PRODUCTS**

Fire may create Carbon monoxide (CO). Carbon dioxide (CO<sub>2</sub>). Fire may result in the reaction with other substances to produce hazardous products. Above 175C, decomposes to Aconitic acid, Citraconic acid, Itaconic acid, Acetonedicarboxylic acid, Carbon dioxide and water.

**11 TOXICOLOGICAL INFORMATION**

TOXIC DOSE 1 - LD 50                      5040 mg/kg (oral-mouse)

**GENERAL INFORMATION**

The substance has been shown to be highly irritating to eyes when tested on rabbits, it is therefore classified as irritating to eyes.

**INHALATION**

Dusts are irritating to the respiratory system.

**INGESTION**

May cause irritation. Ingestion of large amounts may cause discomfort, nausea, vomiting or diarrhoea.

**SKIN CONTACT**

May cause irritation on prolonged or repeated contact. Irritation on contact with broken skin.

**EYE CONTACT**

Irritating to eyes.

**12 ECOLOGICAL INFORMATION****ECOTOXICITY**

Citric acid occurs naturally in the environment and is found in all types of water and soil in small amounts. The product may affect the acidity (pH-factor) in water with risk of harmful effects to aquatic organisms. Ecological effects cannot be excluded in the event of improper handling or disposal.

LC 50, 96 Hrs, FISH mg/l                      440-760 (L.idus)

**BIOACCUMULATION**

Low bioaccumulation potential.

**DEGRADABILITY**

Good biodegradability

**13 DISPOSAL CONSIDERATIONS**

**CITRIC ACID ANHYDROUS TECH****GENERAL INFORMATION**

Any waste material is classed as hazardous waste, it should only be disposed of through licenced waste handlers and treatment sites. Do not allow unauthorised disposal to the environment.

**DISPOSAL METHODS**

Dispose of waste and residues in accordance with local authority requirements. Avoid unauthorised disposal. Do not dump illegally onto land or into water.

**14 TRANSPORT INFORMATION**

**GENERAL** The product is not covered by international regulation on the transport of dangerous goods (IMDG, IATA, ADR/RID).  
No transport warning sign required.

**15 REGULATORY INFORMATION****LABELLING**

Irritant

**RISK PHRASES**

R36 Irritating to eyes.

**SAFETY PHRASES**

S24/25 Avoid contact with skin and eyes.

S60 This material and its container must be disposed of as hazardous waste.

**EU DIRECTIVES**

Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, including amendments.

**STATUTORY INSTRUMENTS**

Chemicals (Hazard Information and Packaging) Regulations. Control of Substances Hazardous to Health.

**GUIDANCE NOTES**

Workplace Exposure Limits EH40. Approved Classification and Labelling Guide (CHIP 4)

**16 OTHER INFORMATION****GENERAL INFORMATION**

This datasheet is not intended to be a replacement for a full risk assessment, these should always be carried out by competent persons.

**INFORMATION SOURCES**

Raw material safety data sheets. ESIS Database IUCLID Datasheet

**REVISION COMMENTS**

General rewrite

REVISION DATE 07/05/2010

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**SAFETY DATA SHEET STATUS**

Approved.