CONTACT
0800 990 3258
enquiries@reagent.co.uk

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 18 Aston Fields Road Whitehouse Industrial Estate Runcorn Cheshire WA7 3DL T: 01928 716903 F: 01928 716425 E: info@reagent.co.uk
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!

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_2).

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.

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/m3	pH-VALUE, DILUTED SOLUTION	1.8 5
AUTO IGNITION TEMPERATURE (°C)	345	PARTITION COEFFICIENT (N-Octanol/Water)	-1.72
SOLUBILITY VALUE (g/100g H2O@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 (CO2). 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

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SDS NO.	20984

SAFETY DATA SHEET STATUS

Approved.