

SAFETY DATA SHEET CITRIC ACID ANHYDROUS

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product name	CITRIC ACID ANHYDROUS
Product number	20184
Synonyms; trade names	2-HYDROXY 1,2,3 PROPANE TRICARBOXYLIC ACID,CITRIC ACID ANHYDROUS BP2003/E330/USP27,CITRIC ACID ANH FG 30-100 M,CITRIC ACID ANHYDROUS F6000,CITRIC ACID ANHYDROUS N1560,CITRIC ACID 0AQ FCC ed7,CITRIC ACID WV,CITRIC ACID 0AQ,CITRIC ACID WV GRAN,CITRIC ACID ANH E330 12-40M LT,CITRIC ACID ANH E330 16-40M YX
REACH registration number	01-2119457026-42
CAS number	77-92-9
EC number	201-069-1

1.2. Relevant identified uses of the substance or mixture and uses advised against

Identified uses	Food industry Cosmetics Industrial application
-----------------	--

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification

Physical hazards	Not Classified
Health hazards	Eye Irrit. 2 - H319
Environmental hazards	Not Classified

CITRIC ACID ANHYDROUS

Classification (67/548/EEC or 1999/45/EC) Xi; R36

Environmental The product is not expected to be hazardous to the environment.

2.2. Label elements

EC number 201-069-1

Pictogram



Signal word Warning

Hazard statements H319 Causes serious eye irritation.

Precautionary statements P264 Wash contaminated skin thoroughly after handling.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337+P313 If eye irritation persists: Get medical advice/attention.

2.3. Other hazards

This substance is not classified as PBT or vPvB according to current EU criteria.

SECTION 3: Composition/information on ingredients

3.1. Substances

Product name CITRIC ACID ANHYDROUS
REACH registration number 01-2119457026-42
CAS number 77-92-9
EC number 201-069-1
Composition comments The data shown are in accordance with the latest EC Directives.

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation Move affected person to fresh air at once. Get medical attention if any discomfort continues.

Ingestion Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Rinse mouth thoroughly with water. Give plenty of water to drink. Get medical attention if any discomfort continues.

Skin contact Remove contaminated clothing immediately and wash skin with soap and water. Get medical attention if any discomfort continues.

Eye contact Rinse immediately with plenty of water. Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15 minutes. Get medical attention if any discomfort continues.

4.2. Most important symptoms and effects, both acute and delayed

Eye contact Irritation of eyes and mucous membranes.

4.3. Indication of any immediate medical attention and special treatment needed

Notes for the doctor No specific recommendations. If in doubt, get medical attention promptly.

CITRIC ACID ANHYDROUS

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media Extinguish with alcohol-resistant foam, carbon dioxide, dry powder or water fog.

Unsuitable extinguishing media Do not use water jet as an extinguisher, as this will spread the fire.

5.2. Special hazards arising from the substance or mixture

Specific hazards Oxides of the following substances: Carbon.

5.3. Advice for firefighters

Special protective equipment for firefighters Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions Follow precautions for safe handling described in this safety data sheet. Avoid contact with skin and eyes. Avoid generation and spreading of dust. Avoid inhalation of dust. Provide adequate ventilation.

6.2. Environmental precautions

Environmental precautions Spillages or uncontrolled discharges into watercourses must be reported immediately to the Environmental Agency or other appropriate regulatory body.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up Remove spillage with vacuum cleaner. If not possible, collect spillage with shovel, broom or the like. Flush contaminated area with plenty of water. Collect and place in suitable waste disposal containers and seal securely. For waste disposal, see Section 13.

6.4. Reference to other sections

Reference to other sections Wear protective clothing as described in Section 8 of this safety data sheet.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Usage precautions Avoid contact with skin and eyes. Provide adequate ventilation. Avoid generation and spreading of dust. Avoid inhalation of dust.

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions Keep container tightly closed. Keep only in the original container. Store in closed original container at temperatures between 5°C and 30°C.

7.3. Specific end use(s)

Specific end use(s) The identified uses for this product are detailed in Section 1.2.

SECTION 8: Exposure Controls/personal protection

8.1. Control parameters

Occupational exposure limits

Long-term exposure limit (8-hour TWA): WEL 4 mg/m³

Short-term exposure limit (15-minute): WEL 10 mg/m³

WEL = Workplace Exposure Limit

CITRIC ACID ANHYDROUS

Ingredient comments WEL = Workplace Exposure Limits

PNEC
 - Fresh water; 0.44 mg/l
 - Marine water; 0.044 mg/l

8.2. Exposure controls

Protective equipment



Appropriate engineering controls

Provide adequate ventilation. Avoid inhalation of dust. Observe any occupational exposure limits for the product or ingredients.

Eye/face protection

The following protection should be worn: Chemical splash goggles.

Hand protection

Use protective gloves. The most suitable glove should be chosen in consultation with the glove supplier/manufacturer, who can provide information about the breakthrough time of the glove material.

Other skin and body protection

Wear rubber apron. Wear rubber footwear.

Hygiene measures

Provide eyewash station and safety shower. Wash hands at the end of each work shift and before eating, smoking and using the toilet. Remove contaminated clothing and wash the skin thoroughly with soap and water after work. Contaminated clothing should be placed in a closed container for disposal or decontamination.

Respiratory protection

If ventilation is inadequate, suitable respiratory protection must be worn.

SECTION 9: Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

Appearance	Crystalline powder.
Colour	White.
Odour	Odourless.
pH	pH (diluted solution): 1.8 5
Melting point	153°C
Relative density	1.665 @ °C
Bulk density	400 - 1300 kg/m ³
Solubility(ies)	59 - 80 @ °C Soluble in water. Soluble in the following materials: Ethanol.
Partition coefficient	: -1.72
Auto-ignition temperature	345°C

9.2. Other information

Other information Not determined.

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity There are no known reactivity hazards associated with this product.

10.2. Chemical stability

CITRIC ACID ANHYDROUS

Stability Stable at normal ambient temperatures and when used as recommended.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions Not determined.

10.4. Conditions to avoid

Conditions to avoid Avoid excessive heat for prolonged periods of time. Avoid generation and spreading of dust.

10.5. Incompatible materials

Materials to avoid Strong alkalis. Strong oxidising agents.

10.6. Hazardous decomposition products

Hazardous decomposition products Oxides of carbon. Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity - dermal

Acute toxicity dermal (LD₅₀ mg/kg) 2,000

Inhalation May cause respiratory system irritation.

Ingestion May cause discomfort if swallowed.

Skin contact Powder may irritate skin.

Eye contact Irritating to eyes.

SECTION 12: Ecological Information

Ecotoxicity The product components are not classified as environmentally hazardous. However, large or frequent spills may have hazardous effects on the environment.

12.1. Toxicity

Toxicity Not considered toxic to fish.

Acute toxicity - fish LC₅₀, 96 hours: 440-706 mg/l, Fish

12.2. Persistence and degradability

Persistence and degradability The product is readily biodegradable.

Biological oxygen demand 526 g O₂/g substance

Chemical oxygen demand 728 g O₂/g substance

12.3. Bioaccumulative potential

Bioaccumulative potential The product does not contain any substances expected to be bioaccumulating.

Partition coefficient : -1.72

12.4. Mobility in soil

Mobility The product is soluble in water.

12.5. Results of PBT and vPvB assessment

CITRIC ACID ANHYDROUS

Results of PBT and vPvB assessment This product does not contain any substances classified as PBT or vPvB.

12.6. Other adverse effects

Cod 728mg/g

Other adverse effects Not determined.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

General information Waste should be treated as controlled waste. Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.

Disposal methods Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.

SECTION 14: Transport information

General The product is not covered by international regulations on the transport of dangerous goods (IMDG, IATA, ADR/RID).

14.1. UN number

No information required.

14.2. UN proper shipping name

No information required.

14.3. Transport hazard class(es)

No information required.

14.4. Packing group

No information required.

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant

No.

14.6. Special precautions for user

No information required.

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code No information required.

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

National regulations The Chemicals (Hazard Information and Packaging for Supply) Regulations 2009 (SI 2009 No. 716).
Control of Substances Hazardous to Health Regulations 2002 (as amended).

CITRIC ACID ANHYDROUS

EU legislation	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) (as amended). Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures (as amended).
Guidance	CHIP for everyone HSG228. Workplace Exposure Limits EH40. Safety Data Sheets for Substances and Preparations.

15.2. Chemical safety assessment

A chemical safety assessment has been carried out.

Inventories

EU - EINECS/ELINCS

All the ingredients are listed or exempt.

Canada - DSL/NDSL

DSL

SECTION 16: Other information

Revision comments	NOTE: Lines within the margin indicate significant changes from the previous revision.
Revision date	11/05/2015
Revision	02
SDS number	20184
SDS status	Approved.
Signature	Jitendra Panchal
Risk phrases in full	R36 Irritating to eyes.
Hazard statements in full	H319 Causes serious eye irritation.