



## Safety Data Sheet

### ACIDO CITRICO MONOIDRATO FU

Safety Data Sheet dated 27/5/2016, version 5

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

##### 1.1. Product identifier

Mixture identification:

Trade name: ACIDO CITRICO MONOIDRATO FU

Trade code: EXP00100700

CAS number: 5949-29-1

EC number: 201-069-1

REACH number: 01-2119457026-42-XXXX

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

Recommended use:

Industrial Use

Food Use

##### 1.3. Details of the supplier of the safety data sheet

Company:

Perdomini-IOC S.p.A.

Via Salvo D'Acquisto, 2

37036 S. Martino B.A. (Verona)

Tel. +39 045 8788611 - Fax +39 045 8780322

Competent person responsible for the safety data sheet:

info@perdomini-ioc.com

##### 1.4. Emergency telephone number


Centro Antiveleni di Milano - CAV Ospedale Niguarda Cà Granda - Tel. +39 02 66101029

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#### SECTION 2: Hazards identification

##### 2.1. Classification of the substance or mixture

EC regulation criteria 1272/2008 (CLP):

 Warning, Eye Irrit. 2, Causes serious eye irritation.

Adverse physicochemical, human health and environmental effects:

No other hazards

##### 2.2. Label elements

Hazard pictograms:



Warning

Hazard statements:

H319 Causes serious eye irritation.

Precautionary statements:

P264 Wash hands 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.

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P337+P313 If eye irritation persists: Get medical advice/attention.

Special Provisions:

None

Special provisions according to Annex XVII of REACH and subsequent amendments:

None

2.3. Other hazards

vPvB Substances: None - PBT Substances: None

Other Hazards:

No other hazards

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### SECTION 3: Composition/information on ingredients

3.1. Substances

Identification of the substance


Trade code: 100602 - 100700

Product type and use: 51

CAS number: 5949-29-1

EC number: 201-069-1

REACH number: 01-2119457026-42-XXXX

Qty	Name	Ident. Number	Classification
>= 70%	Citric Acid	CAS: 5949-29-1 EC: 201-069-1 REACH No.: 01-2119457026-42-XXXX	 3.3/2 Eye Irrit. 2 H319

3.2. Mixtures

N.A.

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### SECTION 4: First aid measures

4.1. Description of first aid measures

In case of skin contact:

Immediately take off all contaminated clothing.

Areas of the body that have - or are only even suspected of having - come into contact with the product must be rinsed immediately with plenty of running water and possibly with soap. Wash thoroughly the body (shower or bath).

Remove contaminated clothing immediately and dispose off safely.

After contact with skin, wash immediately with soap and plenty of water.

In case of eyes contact:

After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an ophthalmologist immediately.

Protect uninjured eye.

In case of Ingestion:

Do not under any circumstances induce vomiting. OBTAIN A MEDICAL EXAMINATION IMMEDIATELY.

In case of Inhalation:

Remove casualty to fresh air and keep warm and at rest.

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

None

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

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In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

Treatment:

None

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#### SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media:

Water.

Carbon dioxide (CO<sub>2</sub>).

Extinguishing media which must not be used for safety reasons:

None in particular.

5.2. Special hazards arising from the substance or mixture

Do not inhale explosion and combustion gases.

Burning produces heavy smoke.

5.3. Advice for firefighters

Use suitable breathing apparatus .

Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

Move undamaged containers from immediate hazard area if it can be done safely.

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#### SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Wear personal protection equipment.

Remove all sources of ignition.

Remove persons to safety.

See protective measures under point 7 and 8.

6.2. Environmental precautions

Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains.

Retain contaminated washing water and dispose it.

In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.

Suitable material for taking up: absorbing material, organic, sand

6.3. Methods and material for containment and cleaning up

Wash with plenty of water.

6.4. Reference to other sections

See also section 8 and 13

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#### SECTION 7: Handling and storage

7.1. Precautions for safe handling

Avoid contact with skin and eyes, inhalation of vapours and mists.

Don't use empty container before they have been cleaned.

Before making transfer operations, assure that there aren't any incompatible material residuals in the containers.

Contaminated clothing should be changed before entering eating areas.

Do not eat or drink while working.

See also section 8 for recommended protective equipment.

7.2. Conditions for safe storage, including any incompatibilities

Keep away from food, drink and feed.

Incompatible materials:

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None in particular.

Instructions as regards storage premises:

Adequately ventilated premises.

#### 7.3. Specific end use(s)

None in particular

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

No occupational exposure limit available

#### DNEL Exposure Limit Values

N.A.

#### PNEC Exposure Limit Values

Citric acid - CAS: 5949-29-1

Target: Fresh Water - Value: 0.44 mg/l

Target: Freshwater sediments - Value: 3.46 mg/kg

Target: Marine water sediments - Value: 34.6 mg/kg

Target: Marine water - Value: 0.044 mg/l

Target: Soil (agricultural) - Value: 33.1 mg/kg

### 8.2. Exposure controls

#### Eye protection:

Use close fitting safety goggles, don't use eye lens.

#### Protection for skin:

Use clothing that provides comprehensive protection to the skin, e.g. cotton, rubber, PVC or viton.

#### Protection for hands:

#### Respiratory protection:

#### Thermal Hazards:

None

#### Environmental exposure controls:

None

#### Appropriate engineering controls:

None

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Properties	Value	Method:	Notes:
Appearance and colour:	White crystals	--	--
Odour:	odourless	--	--
Odour threshold:	n.a.	--	--
pH:	1.8	--	--
Melting point / freezing point:	n.a.	--	--
Initial boiling point and boiling range:	n.a.	--	--
Flash point:	n.a.	--	--
Evaporation rate:	n.a.	--	--
Solid/gas flammability:	non	--	--

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	inflammable		
Upper/lower flammability or explosive limits:	n.a.	--	--
Vapour pressure:	n.a.	--	--
Vapour density:	n.a.	--	--
Relative density:	1542 g/cm <sup>3</sup>	--	--
Solubility in water:	880 g/l a 20°C	--	--
Solubility in oil:	41.9%	--	--
Partition coefficient (n-octanol/water):	Log Pow - 1.72	--	--
Auto-ignition temperature:	absent	--	--
Decomposition temperature:	> 170 °C	--	--
Viscosity:	n.a.	--	--
Explosive properties:	Absent	--	--
Oxidizing properties:	absent	--	--

#### 9.2. Other information

Properties	Value	Method:	Notes:
Miscibility:	N.A.	--	--
Fat Solubility:	N.A.	--	--
Conductivity:	N.A.	--	--
Substance Groups relevant properties	N.A.	--	--

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

### 10.2. Chemical stability

### 10.3. Possibility of hazardous reactions

It may generate flammable gases on contact with dithiocarbamates, elementary metals (alkalis, alkaline earth, powder alloys or vapours) nitrides, and powerful reducing agents.

It may generate toxic gases on contact with dithiocarbamates, inorganic fluorides, inorganic sulphides, and powerful oxidising agents.

It may catch fire on contact with elementary metals (alkalis and alkaline earth).

### 10.4. Conditions to avoid

### 10.5. Incompatible materials

### 10.6. Hazardous decomposition products

None.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

Toxicological information of the substance:

N.A.

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If not differently specified, the information required in Regulation (EU)2015/830 listed below must be considered as N.A.:

- a) acute toxicity;
- b) skin corrosion/irritation;
- c) serious eye damage/irritation;
- d) respiratory or skin sensitisation;
- e) germ cell mutagenicity;
- f) carcinogenicity;
- g) reproductive toxicity;
- h) STOT-single exposure;
- i) STOT-repeated exposure;
- j) aspiration hazard.

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#### SECTION 12: Ecological information

##### 12.1. Toxicity

Adopt good working practices, so that the product is not released into the environment.

Acido citrico monoidrato - CAS: 5949-29-1

##### a) Aquatic acute toxicity:

Endpoint: LC50 - Species: Algae = 425 mg/l - Duration h: 168 - Notes: Scenedesmus quadricauda

Endpoint: LC50 - Species: Daphnia = 1535 mg/l - Duration h: 24 - Notes: Daphnia magna

Endpoint: LC50 - Species: Fish = 440 mg/l - Duration h: 48 - Notes: Leuciscus idus melanotus

Endpoint: LC50 - Species: BAT = 10000 mg/l - Duration h: 168 - Notes: Pseudomonas

##### 12.2. Persistence and degradability

None

Acido citrico monoidrato - CAS: 5949-29-1

Biodegradability: Readily biodegradable - Test: N.A. - Duration: N.A. - %: N.A. - Notes: N.A.

##### 12.3. Bioaccumulative potential

Acido citrico monoidrato - CAS: 5949-29-1

Bioaccumulation: Not bioaccumulative - Test: N.A. N.A. - Duration: N.A. - Notes: N.A.

##### 12.4. Mobility in soil

N.A.

##### 12.5. Results of PBT and vPvB assessment

vPvB Substances: None - PBT Substances: None

##### 12.6. Other adverse effects

None

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#### SECTION 13: Disposal considerations

##### 13.1. Waste treatment methods

Recover if possible. In so doing, comply with the local and national regulations currently in force.

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#### SECTION 14: Transport information

##### 14.1. UN number

Not classified as dangerous in the meaning of transport regulations.

##### 14.2. UN proper shipping name

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- N.A.
- 14.3. Transport hazard class(es)  
N.A.
- 14.4. Packing group  
N.A.
- 14.5. Environmental hazards  
Marine pollutant: No  
N.A.
- 14.6. Special precautions for user  
N.A.
- 14.7. Transport in bulk according to Annex II of Marpol and the IBC Code  
No

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#### SECTION 15: Regulatory information

- 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture  
Dir. 98/24/EC (Risks related to chemical agents at work)  
Dir. 2000/39/EC (Occupational exposure limit values)  
Regulation (EC) n. 1907/2006 (REACH)  
Regulation (EC) n. 1272/2008 (CLP)  
Regulation (EC) n. 790/2009 (ATP 1 CLP) and (EU) n. 758/2013  
Regulation (EU) 2015/830  
Regulation (EU) n. 286/2011 (ATP 2 CLP)  
Regulation (EU) n. 618/2012 (ATP 3 CLP)  
Regulation (EU) n. 487/2013 (ATP 4 CLP)  
Regulation (EU) n. 944/2013 (ATP 5 CLP)  
Regulation (EU) n. 605/2014 (ATP 6 CLP)
- Restrictions related to the product or the substances contained according to Annex XVII Regulation (EC) 1907/2006 (REACH) and subsequent modifications:  
None
- Where applicable, refer to the following regulatory provisions :  
Directive 82/501/EEC ('Activities linked to risks of serious accidents') and subsequent amendments.  
Regulation (EC) nr 648/2004 (detergents).  
1999/13/EC (VOC directive)
- Provisions related to directive EU 2012/18 (Seveso III):  
N.A.
- 15.2. Chemical safety assessment  
No

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#### SECTION 16: Other information

- Text of phrases referred to under heading 3:  
H319 Causes serious eye irritation.
- This document was prepared by a competent person who has received appropriate training.
- Main bibliographic sources:  
ECDIN - Environmental Chemicals Data and Information Network - Joint Research Centre, Commission of the European Communities  
SAX's DANGEROUS PROPERTIES OF INDUSTRIAL MATERIALS - Eight Edition - Van Nostrand Reinold
- The information contained herein is based on our state of knowledge at the above-specified date. It refers solely to the product indicated and constitutes no guarantee of particular quality.

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### ACIDO CITRICO MONOIDRATO FU

It is the duty of the user to ensure that this information is appropriate and complete with respect to the specific use intended.

This MSDS cancels and replaces any preceding release.

ADR:	European Agreement concerning the International Carriage of Dangerous Goods by Road.
CAS:	Chemical Abstracts Service (division of the American Chemical Society).
CLP:	Classification, Labeling, Packaging.
DNEL:	Derived No Effect Level.
EINECS:	European Inventory of Existing Commercial Chemical Substances.
GefStoffVO:	Ordinance on Hazardous Substances, Germany.
GHS:	Globally Harmonized System of Classification and Labeling of Chemicals.
IATA:	International Air Transport Association.
IATA-DGR:	Dangerous Goods Regulation by the "International Air Transport Association" (IATA).
ICAO:	International Civil Aviation Organization.
ICAO-TI:	Technical Instructions by the "International Civil Aviation Organization" (ICAO).
IMDG:	International Maritime Code for Dangerous Goods.
INCI:	International Nomenclature of Cosmetic Ingredients.
KSt:	Explosion coefficient.
LC50:	Lethal concentration, for 50 percent of test population.
LD50:	Lethal dose, for 50 percent of test population.
LTE:	Long-term exposure.
PNEC:	Predicted No Effect Concentration.
RID:	Regulation Concerning the International Transport of Dangerous Goods by Rail.
STE:	Short-term exposure.
STEL:	Short Term Exposure limit.
STOT:	Specific Target Organ Toxicity.
TLV:	Threshold Limiting Value.
TWATLV:	Threshold Limit Value for the Time Weighted Average 8 hour day. (ACGIH Standard).
WGK:	German Water Hazard Class.