MATERIAL SAFETY DATA SHEET

According to European Regulation 1907/2006 (REACH), European Regulation 1272/2008 (CLP) and European Regulation 453/2010

CYCLAMIC ACID E-952

Issued: February 2003 Version: 05 (16/06/11)

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1. Identification of the substance/mixture and of the company/undertaking.

1.1. Product identifier:

Cyclamic Acid

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

Sweetener for Food, Food additive (E-952) according to the European Directive and European Pharmacopoeia.

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

Productos Aditivos, S.A.

Planta: Av. Ferreria, 40. Pol. Ind. La Ferreria

E – 08110 Montcada i Reixac

(España)

Tel.: +34 93 564 48 97 Fax: +34 93 564 15 30

E-mail: info@productosaditivos.com Web: www.productosaditivos.com

1.4. Emergency telephone number:

Spain Service National Toxicological Information: +34 91 562 04 20

Catalonia Emergency: +34 93 586 77 00

2. Hazards identification.

2.1. Classification of the substance or mixture.

Not classified as hazardous according to Regulation 1272 /2008.

2.2. Label elements.

No Hazard label required.

2.3. Other hazards.

Not classified as PBT or vPvB.

3. Composition / Information on components.

Name: Cyclamic acid.

Synonymous: N-Cyclohexylsulphamic acid.

Formula: C₆H₁₃NO₃S

Relative molecular mass: 179

N° CAS: 100-88-9; EINECS: 202-898-1

4. First aid measures.

- 4.1. Description of first aid measures.
 - ✓ Inhalation exposure: Slightly irritant by inhalation. In this case, get the person to fresh air.
 - ✓ Skin contact: Wash with plenty of water.
 - ✓ Eyes contact: Flush with plenty of water. Apply topic eyewash if they get irritated. Get medical advice if necessary.
 - ✓ Ingestion: Due to its taste, an excessive exposure is very difficult. If it occurs, give a plenty of water, and get medical advise.
- 4.2. Most important symptoms and effects, both acute and delayed.

None reported.

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

The only care needed is as described above.

5. Fire fighting measures.

5.1. Extinguishing media:

Water. Foam. Dry chemical. CO₂.

5.2. Special hazards arising from the substance or mixture:

When burning, the product gives off sulphurous and nitrous gases, CO and CO₂.

5.3. Advice for fire-fighters:

Self-containing breathing apparels and fireproof clothes are recommended.

6. Accidental release measures.

6.1. Personal precautions, protective equipment and emergency y procedures:

Glasses, gloves and mask for dust.

6.2. Environmental precautions:

Collect and send to plant for reprocessing, or incineration according to Point 13.

6.3. Methods and material for containment and cleaning up:

Sweep or vacuum, avoiding dust formation, and wash with water. Send solid wastes to treatment.

7. Handling and storage.

7.1. Precautions for safe handling:

Wear glasses, gloves and masks to avoid dust inhalation.

7.2. Conditions for safe storage, including any incompatibilities:

Store at room temperature and dry conditions in a well-closed packaging. *Indications for plants or warehouses:* under certain conditions the dust suspended in air can be ignited by static electricity.

7.3. Specific end use(s):

Due its food use, in storage it must be protected from humidity and possible external vectors or pests. Packages must be kept separate from walls and floor.

8. Exposure controls/personal protection.

8.1. Control parameters:

Food additive, not applicable.

8.2. Exposure controls:

No risk of excessive exposure to a normal product handling.

9. Physical and Chemicals properties.

Appearance: White crystals or white crystalline powder.

Relative density: 0,4 to 0,6 kg/L

Odour: Odourles

Flavour: Intensely sweet

Solubility: Water solubility: 150 g/L at 20°C. Solubility in other products: Soluble in ethanol

pH (10% p/v, 20°C): 0,8 to 1,2 **Melting point:** 169 °C - 170 °C

Flash point: > 200°C Flammability: See point 8.

Oxidising properties: No oxidising properties

10. Stability and reactivity.

10.1. Reactivity:

The product is not particularly reactive.

10.2. Chemical stability:

The product is chemically stable.

10.3. Possibility of hazardous reactions:

None reported.

10.4. Conditions to avoid:

Avoid suspension of dust in the air.

10.5. Incompatible materials.

Avoid contact with strong oxidizing agents, strong acids and nitrites.

10.6. Hazardous decomposition products:

See section 5.2 of this document.

11. Toxicological information:

- 11.1 Information on toxicological effects:
- ✓ *Toxicological effects* if the user comes into contact with the substance: No allergic reactions are known.

ADI (Acceptable Daily Intake) EU 7 mg/kg and JECFA (OMS) 11 mg/kg.

12. Ecological Information

12.1. Toxicity:

No data are available.

12.2. Persistence and degradability:

Can be processed in a standard sewage treatment plant, producing ${\rm CO_2}$, sulphate and nitrogen derived substances.

12.3. Bio-accumulative potential:

Not bio-accumulative.

12.4. Mobility in soil:

No data are available.

12.5. Results of PBT and vPvB assessment:

No data are available.

12.6 Other adverse effects.

No data are available.

13. Disposal considerations.

13.1 Waste treatment methods:

Disposal of the substance: Any applicable regulation must be respected. Can be incinerated in an incineration plant, using a post burning and a collector of sulphurous and nitrous gases.

Disposal of the packaging: Any applicable regulation must be respected. Cardboard and plastic packages can be incinerated. Metallic parts of drums must be removed before incinerating.

14. Transport information.

The product is not considered hazardous for transport.

14.1. UN number:

Not applicable.

14.2. UN proper shipping name:

Not applicable.

14.3. Transport hazard class(es):

Not hazardous for transport.

14.4. Packing group:

Not applicable.

14.5. Environmental hazards:

No special hazards to the environment.

14.6. Especial precautions for user:

No special precautions required by the user.

15. Regulatory information.

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

The substance is a food additive (E-952), legislated by Directive 94/35/EC and subsequent amendments and also by the European Pharmacopoeia.

15.2. Chemical safety assessment:

A chemical safety assessment of the product has not been performed.

16. Other information.

Cyclamic acid is allowed as Food additive in the European Union according to the Directive 94/35/EC about sweeteners in foodstuffs, with the number E-952, complies also with the Purity Criteria for Sweeteners defined in the European Directive 2008/60/EC and the European pharmacopoeia.

Changes in this version: Adaptation of the safety data sheet to the requirements of Regulation 453/2010

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of this publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release, and is not to be considered as warranty or Quality Specification. The information relates only to the specific material designated and is not valid for such material used in combination with any other materials or in any process.