



## 1. IDENTIFICATION OF THE PRODUCT AND THE COMPANY

**Identification of the product**

- Type of product : Pure product .
- Use of product : Several industrial applications ( Food and pharma additive (E300), ...).

**Company identification** : See footer of Material Safety Data Sheet.

**Emergency phone number :**

- Belgium: Antipoison Center Brussels tel: 070/245.245.
- The Netherlands: National Poisoning Information center – Bilthoven tel: 030/274.88.88

## 2. HAZARD IDENTIFICATION

No significant risks.

## 3. COMPOSITION AND INFORMATION ON INGREDIENTS

Name component(s)	Weight %	CAS nr	EINECS nr	EC annex	Symbol(s)	R-phrases
Ascorbic acid	>99%	50-81-7	200-066-2	----/----		

## 4. FIRST AID MEASURES

**General** : In case of doubt or persistent symptoms, call a physician. Never give anything by mouth to an unconscious person.

**First Aid Measures**

- Inhalation : Remove victim into fresh air. Allow the affected person to rest.
- Skin Contact : Remove contaminated clothing. Rinse skin immediately with mild soap and plenty of water. (shower if necessary). Consult doctor if irritation develops.
- Eye Contact : Rinse immediately thoroughly and long (at least 15 min.) with plenty of water. Remove contact lenses. Consult eye doctor if permanent inconvenience. Do not use a neutralisation agent.
- Ingestion : Rinse mouth with water. Give victim plenty of water to drink. Consult doctor if you feel nauseous.

## 5. FIRE-FIGHTING MEASURES

**Extinguishing Media**

- Suitable : Carbon dioxide, Foam, Powder, Water spray.

**Special Procedures** : Apply water spray or fog to cool nearby equipment. Avoid fire-fighting water to enter environment.

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**5. FIRE-FIGHTING MEASURES (CONT.)**

**Special Exposure Hazards** : Fire may liberate carbon oxides (CO) and smoke.

**Special Protective Equipment for firefighters** : Use self-contained breathing apparatus when in close proximity to fire.

**6. ACCIDENTAL RELEASE MEASURES**

**Personal Precautions** : Evacuate all personnel immediately and ventilate area. Avoid contact with skin and eyes. Wear recommended personal protective equipment. (See chapter 8).

**Environmental Precautions** : Prevent entry of product in public water, sewers or soil. Notify authorities if product enters sewers or public waters.

**Methods for Cleaning Up** : Collect the spillage in closable, suitable disposal containers. For the removal of the waste product, see chapter 13. Residue is to be washed down with plenty of water.

**7. HANDLING AND STORAGE**

**Handling** : Ventilate area. Avoid dust creation. Avoid contact with skin and eyes. Wear recommended personal protective equipment. (See chapter 8). Protection against Fire and Explosion : May cause dust explosion. Take measures against electrostatic discharges.

**Storage** : Keep only in the original, safely locked container in a cool, well ventilated and dry place. Store away from all heat sources, including direct sunlight.

**Keep away from** : Bases, Alcohols, Oxidizing agents, Acids.

**Packaging Material** : Glass, Cardboard, Synthetic material.

**Insuitable Packaging Material** : Iron, Copper.

**8. MEASURES EXPOSURE CONTROL / PERSONAL PROTECTION**

**Engineering Measures** : Ventilate area.

**Industrial Hygiene** : When using, do not eat, drink or smoke.

**Occupational Exposure Limits** : Not established.

**Personal Protection Equipment**

- Respiratory Protection : Ventilation, Local exhaust, Dust respirator.
- Hand Protection : Gloves ( Rubber, ...).
- Eye Protection : Chemical goggles .
- Skin and Body Protection : Suitable protective clothing .

**9. PHYSICAL AND CHEMICAL PROPERTIES**

**Physical State (20°C)** : Solid.  
**Form/Colour** : White.  
**Odour** : Odourless.  
**pH value** : 2 - 3 (5% sol. )  
**Congealing/Melting point** : 192 °C  
**Decomposition temperature** : 192 °C  
**Flash point** : Not applicable.  
**Auto-ignition temperature** : > 370 °C  
**Explosion limits in air** : Not applicable.  
**Solubility in water** : 33 %  
**Log P Octanol/Water (20°C)** : -2,15 to -1,64  
**Surface tension** : 0,004 N/m  
**Bulk density** : 1650 kg/m<sup>3</sup>

**10. STABILITY AND REACTIVITY**

**Stability** : Stable at normal circumstances.  
**Conditions to avoid** : Light, Air, Moisture.  
**Materials to avoid** : Bases, Alcohols, Oxidizing agents, Acids.  
**Hazardous Decomposition Products** : Fire may liberate carbon oxides (CO) and smoke.

**11. TOXICOLOGICAL INFORMATION****Acute toxicity**

- Inhalation : Little chance on irritation.
- Skin contact : May be slightly irritating for the skin.  
Symptoms include: Redness, Pain.
- Eye contact : May be slightly irritating to eyes.  
Symptoms include: Redness, Pain.
- Ingestion : Symptoms include: Cough , Nausea , Stomach complaints , Intestinal complaints.  
Ascorbic acid : LD50 (Rat, oral) : > 5000 mg/kg

**12. ECOLOGICAL INFORMATION**

**Mobility** : Reasonably soluble in water.  
**Persistence and degradability** : Easily biologically degradable.  
**Bioaccumulation** : Bioaccumulation not expected.

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**12. ECOLOGICAL INFORMATION (CONT.)**

**Ecotoxicity** : Product causes a change of the pH-value of water and soil.

Ascorbic acid : LC50 (Fish, 96 h) : > 1000 mg/l (*Leusiscus idus*)

**WGK class (Germany)** : 1 ( Weak water pollutant ).

**Water damaging (The Netherlands)** : 11

**Decontamination exertion (The Netherlands)** : B

**13. DISPOSAL CONSIDERATIONS**

**Waste from residues/Unused products** : The product has to be destroyed according to national or local legislation.

**Removal contaminated packaging** : Packing is to be used exclusively for the packing of this product. After use, empty and close the packing very carefully.

**European list of waste products** : European waste product code: ' XX XX XX '. This code is assigned on the basis of the most current applications and can not be representative for pollutions which are arisen at the effective use of the product. The producer of the waste has to evaluate its process himself and has to grant the appropriate waste coding. See Directive 2001/118/EC.

**14. TRANSPORT INFORMATION**

**Land (Road/Railroad, ADR/RID)** : Product not mentionned in list of dangerous goods for road transport.

**Sea Transport (IMDG)** : Product not mentionned in list of dangerous goods for sea transport.

**15. REGULATORY INFORMATION**

**Remark** : Product not mentionned in list of dangerous goods (Annex 1 of Directive 67/548/ EC, most recent adaptation).

**16. OTHER INFORMATION**

This safety data sheet has been drawn up in accordance with the EC Regulation n° 1907/2006.

This safety data sheet is exclusively made for industrial/professional use.

\* Has changed compared to previous revision.

Sources of used key data : The information contained herein is based on the present state of our knowledge (Producer(s) , ...).

\* Changes : Change of product name , Chapter 1 .

NFPA n° : 0-0-1

*This information is to our knowledge correct and complete on the date of issue of this safety data sheet. The information only concerns the product and does not give any guarantee for the quality and the completeness of the properties of the product, or in case of mixing or using in any other process. It remains the responsibility of the user to assure himself that the information is suitable and complete concerning the special use he makes of the product. BROUWLAND denies all responsibility for loss or damage resulting from the use of these data.*

Rev. Date 6/05/2010

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