

## 1.1 COMPANY IDENTIFICATION

Company's Name: Trulux Pty Ltd

Email address: info@trulux.com.au

Website: www.trulux.com.au

Contact number: +61 (02) 9975 2655

Address: C3/ 1-3 Rodborough Rd, Frenchs Forest NSW 2086 Australia

# 1.2 PRODUCT IDENTIFICATION

Trade name: Vitamin C BP (Ascorbic Acid) - Milled

Reference number: RMTR-0543A

Classification: Refer to clause 2.0

# 1.3 RELEVANT IDENTIFIED USES OF THE SUBSTANCE OR MIXTURE AND USES ADVISED AGAINST

Identified uses: Raw Material

Uses advised against: None to our knowledge.

## 1.4 DETAILS OF THE SUPPLIER OF THE SUBSTANCE INFORMATION SHEET

Supplier's Company: Trulux Pty Ltd

Website: <u>www.trulux.com.au</u>

Address: C3/ 1-3 Rodborough Rd, Frenchs Forest NSW 2086 Australia

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#### 1.5 EMERGENCY CONTACTS - INSTITUTIONAL CENTRES

Australia Poisons Information Centre 13 11 26

#### **2 HAZARDS IDENTIFICATION**

Most important hazards No particular hazards known.

#### **3 COMPOSITION/ INFORMATION ON INGREDIENTS**

Characterization Water soluble vitamin; pharmaceuticals, food additive

Chemical name L (+)-Ascorbic acid

Synonyms Vitamin C

L-Ascorbic acid

(5R)-5-[(1S)-1,2-dihydroxyethyl]-3,4-dihydroxyfuran-2(5H)-one

CAS number 50-81-7

EINECS number 200-066-2

Empirical formula C6H8O6

Molecular mass 176.13 g/mol

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#### **4 FIRST AID MEASURES**

Eye contact Rinse immediately with tap water for 10 minutes - open eyelids

forcibly

Skin contact Remove contaminated clothes, wash affected skin with water and

soap - do not use any solvents

Inhalation Remove the casualty to fresh air and keep him/her calm. In the

event of symptoms get medical treatment

Note to physician Treat symptomatically

#### **5 FIRE FIGHTING MEASURES**

Suitable extinguishing media Water spray jet, dry powder, foam, carbon dioxide

Specific hazards Severe dust explosion hazard

Protection of fire-fighters Precipitate gases/vapors/mists with water spray

#### **6 ACCIDENTAL RELEASE MEASURES**

Methods for cleaning up Collect solids (avoid dust formation) and hand over to waste

removal.

Rinse with plenty of water.

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# **7 HANDLING AND STORAGE**

**Handling** 

Technical measures Processing in closed systems, if possible superposed by inert

> gas (e.g. nitrogen). Local exhaust ventilation necessary. Take precautionary measures against electrostatic charging. Avoid

dust formation; high dust explosion hazard.

Suitable materials Stainless steel, coated steel (protective lacquer), glass,

polyethylene, polypropylene, enamel

Unsuitable materials Aluminum, copper, zinc, Iron

Storage

Storage conditions In closed containers. Protected from humidity. Below 30 °C

Packaging materials Tightly closing; material: coated steel (protective lacquer), glass,

polyethylene, polypropylene, PVC.

#### **8 EXPOSURE CONTROLS AND PERSONAL PROTECTION**

**Engineering Measures** See Section 7.

Monitoring

Threshold value air 10 mg/m3 (defined as 8-hour time-weighted average)

Analytics Sampling on glass fibre filter and gravimetric or chemical

determination

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Personal protective equipment

Respiratory protection In case of high dust concentrations: particle mask or respirator

with independent air supply.

Hand protection Protective gloves (eg. made of Natural Rubber)

Eye protection Safety glasses

#### 9 PHYSICAL AND CHEMICAL PROPERTIES

Color White to almost white

Form Crystalline powder or colorless crystals

Odour Almost odorless, with sharp acidic, pleasant taste

Density 0.9 - 1.2 g/ml

Sieve analysis Retained on 40 mesh NMT 20%, between 40-80mesh NLT 50%.

Solubility Free soluble in water

Soluble in ethanol (96 percent) Virtually insoluble in ethyl ether Virtually insoluble in chloroform

PH value 2.1 - 2.6 (5 % aqueous solution)

Dissociation constant pK1 = 4.17

pK2 = 11.57 (water)

Melting temperature About 190°C (with decomposition)

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#### 10 STABILITY AND REACTIVITY

Stability: Stable at room temperature under exclusion of humidity

Conditions to avoid Humidity

Warming

Materials to avoid Oxidizing agents, atmospheric oxygen, bases, metals, metal

salts

Note On prolonged storage, a yellow discoloration may occur through

> slow decomposition, which does not noticeably diminish biological activity, however in aqueous solutions ascorbic acid is very susceptible to oxidative decomposition, particularly in the

presence of alkali resp. heavy metal ions.

#### 11 TOXICOLOGICAL INFORMATION

Acute Toxicity: - LD50 11'900 mg/kg (oral, rat)

- LD50 8'000 mg/kg (oral, mouse)

- LD50 518 mg/kg (i.v., mouse)

Local effects - Eye: may cause irritations

- Mucous membranes: may cause irritations

- Skin: may cause irritations; particularly in conjunction with

humidity (perspiration).

Chronic toxicity In predisposed individuals 4-12 g/d may cause urinary calculus

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Mutagenicity No suspicion of human mutagenicity

Carcinogenicity Not carcinogenic (several species)

Reproduction toxicity Not teratogenic, not embryotoxic

Note - Oral uptake of up to 9 g per day does not produce any serious

toxic effects, however, even lesser quantities may cause

diarrhoea

- RDA (recommended daily allowance): 60 mg

# 12 ECOLOGICAL INFORMATION

Inherent biodegradability Well inherently biodegradable 97 %, 5 d; 100 %, 15 d

**Ecotoxicity** Barely toxic for fish (rainbow trout): LC50 (96 h) 1020 mg/l

The inhibitory concentration relates to re-attachment to

substrate (Dreissena polymorpha)

MIC (48 h) > 50 mg/l (nominal concentration)

Air pollution Observe local/national regulations

## 13 DISPOSAL CONSIDERATIONS

Waste treatment methods: - Observe local/national regulations regarding waste disposal

- Drain very small quantities into wastewater treatment plant

- Large amounts: incinerate in qualified installation with flue gas

scrubbing

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14 TRANSPORT INFORMATION

Note - Not classified by transport regulations.

15 REGULATORY AND OTHER INFORMATION

Safety, health and environmental regulations specific for the mixture or substance:

• Use - Additive for use in food and pharmaceuticals or food additives.

Biological activity - 1 I.U. (international unit) of vitamin C corresponds to the activity of 50 μg of pure

ascorbic acid

Reference literature ISO 11014-1

16 OTHER INFORMATION

When handled properly by qualified personnel, the product described herein does not present a significant health or safety hazard. Alteration of its characteristics by concentration, evaporation, addition or other substances, or other means may present hazards not specifically addressed herein and which must be

evaluated by the user.

This sheet completes the technical sheets but it does not replace them. The information furnished herein is believed to be accurate and represents the best data currently available to us. No warranty, expressed or implied is made and Trulux Pty Ltd assumes no legal responsibility or liability whatsoever resulting from its use. This does not in any way excuse the user from knowing and applying all the regulations governing his activity. It is the sole responsibility of the user to take all precautions required in handling the product.

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Doc:



This listing must not be considered exhaustive. It does exonerate the user from ensuring that other legal obligations than those mentioned do not exist, relating to the use and storage of the product for which he solely is responsible.

The information and recommendations contained herein are to the best of the manufacturer's knowledge and belief accurate and reliable as of the date indicated. No representation warranty or guarantee, however, is made with regard to accuracy, reliability or completeness. Conditions of use of the material are under the control of the user; therefore, it is the user's responsibility to satisfy itself as to the suitability and completeness of such information for its own particular use.

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