

Material Safety Data Sheet
According to 91/155 EC

Printing date 02.05.2003

Version: 1

Reviewed on 02.05.2003

Product details

Trade name: Chrysal CVB

Article number: T713

Application of the substance / the preparation Cut flower food (professional product)

Manufacturer/Supplier:

Pokon & Chrysal BV

P.O. Box 5300

1410 AH NAARDEN

The Netherlands

Tel.: +31-(0)35-6955888

Fax: +31-(0)35-6955822

Further information obtainable from:

Department: Regulatory Affairs

Contact: P. Herman

Information in case of emergency: Tel.: +31-(0)35-6955851

Chemical characterization

Description: Mixture of substances listed below with nonhazardous additions.

Dangerous components:

CAS: 127-65-1

chloramine T (sodium salt)

C; R 22-31-34-42

50-100%

EINECS: 204-854-7

Additional information: For the wording of the listed risk phrases refer to section 16.

Hazard description:



C Corrosive

Information concerning particular hazards for human and environment:

The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

R 21/22 Harmful in contact with skin and if swallowed.

R 34 Causes burns.

R 41 Risk of serious damage to eyes.

R 42/43 May cause sensitisation by inhalation and skin contact.

Classification system:

The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

General information:

Immediately remove any clothing soiled by the product.

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

(Contd. on page 2)

GB

Material Safety Data Sheet
According to 91/155 EC

Printing date 02.05.2003

Version: 1

Reviewed on 02.05.2003

Trade name: Chrysal CVB

(Contd. of page 1)

- **After inhalation:**
Supply fresh air and to be sure call for a doctor.
In case of unconsciousness place patient stably in side position for transportation.
- **After skin contact:**
Seek immediate medical advice.
Immediately wash with water and soap and rinse thoroughly.
- **After eye contact:** Rinse opened eye for several minutes under running water. Then consult a doctor.
- **After swallowing:**
Rinse out mouth and then drink plenty of water.
Induce vomiting and call for medical help.
Drink plenty of water and provide fresh air. Call for a doctor immediately.

- **Suitable extinguishing agents:**
Foam
Fire-extinguishing powder
Water spray
Carbon dioxide
Use fire extinguishing methods suitable to surrounding conditions.
- **Special hazards caused by the substance, its products of combustion or resulting gases:**
In case of fire, the following can be released:
Hydrogen chloride (HCl)
Nitrogen oxides (NOx)
Sulphur dioxide (SO2)
- **Protective equipment:** Wear self-contained respiratory protective device.

- **Person-related safety precautions:** Wear protective equipment. Keep unprotected persons away.
- **Measures for environmental protection:** Do not allow to enter sewers/ surface or ground water.
- **Measures for cleaning/collecting:**
Use neutralizing agent.
Dispose contaminated material as waste according to item 13.
Ensure adequate ventilation.
- **Additional information:** See Section 8 for information on personal protection equipment.

- **Handling:**
- **Information for safe handling:**
Thorough dedusting.
Ensure good ventilation/exhaustion at the workplace.
- **Information about fire - and explosion protection:** No special measures required.
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** Store only in the original receptacle.
- **Information about storage in one common storage facility:** Store away from foodstuffs.
- **Further information about storage conditions:**
Keep out of reach of children.
Store in dry conditions.
Store in a cool place.

(Contd. on page 3)

Material Safety Data Sheet
According to 91/155 EC

Printing date 02.05.2003

Version: 1

Reviewed on 02.05.2003

Trade name: Chrysal CVB

(Contd. of page 2)

Keep receptacle tightly sealed.

· **Additional information about design of technical facilities:** No further data; see item 7.

· **Ingredients with limit values that require monitoring at the workplace:**

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

· **Additional information:** The lists valid during the making were used as basis.

· **Personal protective equipment:**

· **General protective and hygienic measures:**

Do not eat, drink, smoke or sniff while working.

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work.

Avoid contact with the eyes.

Avoid contact with the eyes and skin.

· **Respiratory protection:**

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.

· **Protection of hands:**



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· **Material of gloves**

Rubber gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

· **Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· **Eye protection:**



Tightly sealed goggles

· **Body protection:** Use protective suit.

GB

(Contd. on page 4)

Material Safety Data Sheet
According to 91/155 EC

Printing date 02.05.2003

Version: 1

Reviewed on 02.05.2003

Trade name: Chrysal CVB

(Contd. of page 3)

General Information

Form: Tablets
Colour: White
Odour: Chlorine-like

Change in condition
Melting point/Melting range: Undetermined.
Boiling point/Boiling range: Undetermined.

Flash point: 192°C

Self-igniting: Product is not selfigniting.

Danger of explosion: Product does not present an explosion hazard.

Density at 20°C: 1.430 g/cm³

Solubility in / Miscibility with water: Soluble.

pH-value (50 g/l) : 8,0-10,3

Thermal decomposition / conditions to be avoided:

- Formation of toxic gases is possible during heating or in case of fire. See 5.
- **Dangerous reactions** No dangerous reactions known.
- **Dangerous decomposition products:** Chlorine

Acute toxicity:

- **Primary irritant effect:**
- **on the skin:** Caustic effect on skin and mucous membranes.

on the eye:

- Strong caustic effect.
- Strong irritant with the danger of severe eye injury.

Sensitization:

- Sensitization possible through inhalation.
- Sensitization possible through skin contact.

Additional toxicological information:

The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:

Harmful

Corrosive

Irritant

Swallowing will lead to a strong caustic effect on mouth and throat and to the danger of perforation of esophagus and stomach.

General notes:

- Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water
- Do not allow product to reach ground water, water course or sewage system.

(Contd. on page 5)

Material Safety Data Sheet
According to 91/155 EC

Printing date 02.05.2003

Version: 1

Reviewed on 02.05.2003

Trade name: Chrysal CVB

(Contd. of page 4)


Must not reach sewage water or drainage ditch undiluted or unneutralized.

Product:
Recommendation: *Must not be disposed together with household garbage. Do not allow product to reach sewage system.*

Uncleaned packaging:
Recommendation: *Disposal must be made according to official regulations.*
Recommended cleansing agents: *Water, if necessary together with cleansing agents.*

Land transport ADR/RID (cross-border)
ADR/RID class: 8 Corrosive substances.
Item: 55c
UN-Number: 3263
Description of goods: 3263 Corrosive solid, basic, organic, n.o.s., sodium-p-toluenesulphonchloro amine

Maritime transport IMDG:



IMDG Class: 8
UN Number: 3263
Packaging group: III
EMS Number: F-A,S-B
MFAG: 760
Marine pollutant: No
Proper shipping name: Corrosive solid, basic, organic, n.o.s., sodium-p-toluenesulphonchloro amine

Air transport ICAO-TI and IATA-DGR:
ICAO/IATA Class: 8
UN/ID Number: 3263
Packaging group: III
Proper shipping name: Corrosive solid, basic, organic, n.o.s., sodium-p-toluenesulphonchloro amine

Labelling according to EU guidelines:
The product has been classified and marked in accordance with EU Directives / Ordinance on Hazardous Materials.

Code letter and hazard designation of product:
C Corrosive

Hazard-determining components of labelling:
chloramine T (sodium salt)

Risk phrases:
21/22 Harmful in contact with skin and if swallowed.
34 Causes burns.

(Contd. on page 6)
GB

Material Safety Data Sheet
According to 91/155 EC

Printing date 02.05.2003


Version: 1

Reviewed on 02.05.2003

Trade name: Chrysal CVB

(Contd. of page 5)

- 41 Risk of serious damage to eyes.
- 42/43 May cause sensitisation by inhalation and skin contact.
- **Safety phrases:**
 - 2 Keep out of the reach of children.
 - 13 Keep away from food, drink and animal feedingstuffs.
 - 20/21 When using do not eat, drink or smoke.
 - 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
 - 27/28 After contact with skin, take off immediately all contaminated clothing, and wash immediately with plenty of water.
 - 37/39 Wear suitable gloves and eye/face protection.
 - 45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
- **National regulations:**
- **Waterhazard class:** Water hazard class 2 (Self-assessment): hazardous for water.


This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- **Relevant R-phrases**
 - 22 Harmful if swallowed.
 - 31 Contact with acids liberates toxic gas.
 - 34 Causes burns.
 - 42 May cause sensitisation by inhalation.
- **Department issuing MSDS:** Department: Regulatory Affairs
- **Contact:** P. Herman

GB