



Printing date 01/29/2015 Version: 2 Reviewed on 01/29/2015

### 1 Identification

- · Product identifier
- · Trade name: RosePro Hydration
- · Article number: 425.355.155
- · Application of the substance / the mixture Cut flower food (professional product)
- · Details of the supplier of the safety data sheet
- · Manufacturer/Supplier:

Chrysal International BV

P.O. Box 5300

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The Netherlands

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- · Information department: Department: Regulatory Affairs of Chrysal International BV, the Netherlands
- · Emergency telephone number: ChemTel Inc. 1-800-255-3924 Int. +01-813-248-0585

### 2 Composition/information on ingredients

- · Chemical characterization: Mixtures
- · Description: Mixture of substances with nonhazardous additions.

· Dangerous components:		
77-92-9	citric acid	2.5-10%
26172-55-4	5-chloro-2-methyl-2H-isothiazol-3-one	< 0.25%

### 3 Hazard(s) identification

- · Classification of the substance or mixture
- · Classification according to Directive 67/548/EEC or Directive 1999/45/EC Irritant

Irritating to eyes. May cause sensitization by skin contact.

· 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.

· Classification system:

The classification was made according to the latest editions of international substances lists, and expanded upon from company and literature data.

- · Label elements
- · Labelling according to EU guidelines:

The product has been classified and marked in accordance with directives on hazardous materials.

· Code letter and hazard designation of product:





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· Hazard-determining components of labeling:

5-chloro-2-methyl-2H-isothiazol-3-one

· Risk phrases:

Irritating to eyes.

May cause sensitization by skin contact.

· Safety phrases:

Avoid contact with skin.

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

Wear suitable gloves and eye/face protection.

This material and its container must be disposed of as hazardous waste.

- · Hazard description:
- · WHMIS classification



- · Classification system:
- · NFPA ratings (scale 0 4)



Health = 1 Fire = 0Reactivity = 0

### 4 First-aid measures

- $\cdot \textbf{\textit{After inhalation:}} \ \textit{Supply fresh air; consult doctor in case of complaints.}$
- · After skin contact: Immediately wash with water and soap and rinse thoroughly.
- · After eye contact:

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

· After swallowing: Rinse out mouth and then drink plenty of water.

### 5 Fire-fighting measures

- · Suitable extinguishing agents:
- CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- · Special hazards arising from the substance or mixture No further relevant information available.
- · Protective equipment: No special measures required.

### 6 Accidental release measures

- · Personal precautions, protective equipment and emergency procedures Wear protective clothing.
- · Environmental precautions:
- Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage
- · Methods and material for containment and cleaning up: Ensure adequate ventilation.
- · Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

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See Section 13 for disposal information.

### 7 Handling and storage

· Precautions for safe handling

Ensure good ventilation/exhaustion at the workplace.

Prevent formation of aerosols.

- · Information about protection against explosions and fires: No special measures required.
- · Storage
- Requirements to be met by storerooms and receptacles: No special requirements.
- · Information about storage in one common storage facility: Not required.
- · Further information about storage conditions: None.
- · Specific end use(s) No further relevant information available.

### 8 Exposure controls/personal protection

- · Additional information about design of technical systems: No further data; see item 7.
- · Components 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 that were valid during the creation were used as basis.
- · Personal protective equipment:
- · General protective and hygienic measures:

The usual precautionary measures for handling chemicals should be followed.

Wash hands before breaks and at the end of work.

- · Breathing equipment: Not required.
- · Protection of hands:



Protective gloves

· Material of 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.

· Penetration time of glove material

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

· Eye protection: Safety glasses recommanded.

## 9 Physical and chemical properties

· General Information

 $\cdot$  Appearance:

Form: Fluid

Color: According to product specification

· Odor: Characteristic

• pH-value: ≤2.0

· Change in condition

Melting point/Melting range: Undetermined.

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Boiling point/Boiling range:	100 °C
· Flash point:	Not applicable.
· Auto igniting:	Product is not selfigniting.
· Danger of explosion:	Product does not present an explosion hazard.
· Vapor pressure at 20 °C:	23 hPa
· Density at 20 °C:	1.02 g/cm <sup>3</sup>
· Solubility in / Miscibility with Water:	Fully miscible.
· Solvent content: Organic solvents: Water:	0.0 % 93.8 %
Solids content: Other information	4.8 % No further relevant information available.

### 10 Stability and reactivity

- · Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- · Incompatible materials: No further relevant information available.
- · Hazardous decomposition products: No dangerous decomposition products known.

## 11 Toxicological information

- · Acute toxicity:
- · Primary irritant effect:
- · on the skin: Irritant to skin and mucous membranes.
- $\cdot$  on the eye: Irritating effect.
- · Sensitization: Sensitization possible through skin contact.
- · Additional toxicological information:

The product shows the following dangers according to internally approved calculation methods for preparations:

Irritant

- · Carcinogenic categories
- · IARC (International Agency for Research on Cancer)

None of the ingredients is listed.

· NTP (National Toxicology Program)

None of the ingredients is listed.

· OSHA-Ca (Occupational Safety & Health Administration)

None of the ingredients is listed.

### 12 Ecological information

- · Aquatic toxicity: No further relevant information available.
- · Persistence and degradability No further relevant information available.
- · Bioaccumulative potential No further relevant information available.

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- · Additional ecological information:
- · General notes:

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

Rinse off of bigger amounts into drains or the aquatic environment may lead to decreased pH-values. A low pH-value harms aquatic organisms. In the dilution of the use-level the pH-value is considerably increased, so that after the use of the product the aqueous waste, emptied into drains, is only low water-dangerous.

### 13 Disposal considerations

- · Waste treatment methods
- · Recommendation:

Must not be disposed of together with household garbage. Do not allow product to reach sewage system. Small amounts may be diluted with plenty of water and washed away. Dispose of bigger amounts in accordance with Local Authority requirements.

- · Uncleaned packagings:
- · Recommendation:

Disposal must be made according to official regulations.

Empty contaminated packagings thoroughly. They can be recycled after thorough and proper cleaning.

· Recommended cleansing agent: Water, if necessary with cleaning agents.

14 Transport information	
· UN-Number · DOT, TDG, ADN, IMDG, IATA	Void
· UN proper shipping name · DOT, TDG, ADN, IMDG, IATA	Void
· Transport hazard class(es)	
· DOT, TDG, ADN, IMDG, IATA · Class	Void
· Packing group · DOT, TDG, IMDG, IATA	Void
· Environmental hazards: · Marine pollutant:	No
· Special precautions for user	Not applicable.
· Transport in bulk according to Annex II MARPOL73/78 and the IBC Code	of Not applicable.
· Transport/Additional information:	Not dangerous according to the above specifications.

## 15 Regulatory information

- · Sara
- · Section 355 (extremely hazardous substances):

None of the ingredient is listed.

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### · Section 313 (Specific toxic chemical listings):

None of the ingredients is listed.

### · TSCA (Toxic Substances Control Act):

All ingredients are listed.

- · Proposition 65
- · Chemicals known to cause cancer:

None of the ingredients is listed.

### · Chemicals known to cause reproductive toxicity for females:

None of the ingredients is listed.

### · Chemicals known to cause reproductive toxicity for males:

None of the ingredients is listed.

### · Chemicals known to cause developmental toxicity:

None of the ingredients is listed.

- · Cancerogenity categories
- · EPA (Environmental Protection Agency)

None of the ingredients is listed.

### · TLV (Threshold Limit Value established by ACGIH)

None of the ingredients is listed.

### · MAK (German Maximum Workplace Concentration)

None of the ingredients is listed.

### · NIOSH-Ca (National Institute for Occupational Safety and Health)

None of the ingredients is listed.

### · Product related hazard informations:

The product has been classified and marked in accordance with directives on hazardous materials.

· Hazard symbols:



Irritani

### · Hazard-determining components of labeling:

5-chloro-2-methyl-2H-isothiazol-3-one

### · Risk phrases:

Irritating to eyes.

May cause sensitization by skin contact.

#### · Safety phrases:

Avoid contact with skin.

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

Wear suitable gloves and eye/face protection.

This material and its container must be disposed of as hazardous waste.

### 16 Other information

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.





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· Department issuing MSDS:

Chrysal International BV, the Netherlands

Department: Product Safety & Regulatory Affairs

- $\cdot \textit{Date of preparation / last revision } 01/29/2015 \, / \, 1$
- \* Data compared to the previous version altered.

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