

Safety Data Sheet acc. to OSHA HCS

Printing date 05/21/2015

Version: 3

Reviewed on 05/21/2015

1 Identification

- **Product identifier**
- **Trade name: Professional 1 (Hydration)**
- **Article number: C552**
- **Relevant identified uses of the substance or mixture and uses advised against**
No further relevant information available.
- **Application of the substance / the mixture** Cut flower pretreatment product
- **Details of the supplier of the safety data sheet**
Chrysal International BV
PO BOX 5300
1410 AH Naarden
The Netherlands
T: +31 35 6955888
- **Manufacturer/Supplier:**
Chrysal Colombia S.A:
Cra 106 No. 15-25
Manzana 9, Bodega 21
Bogotá - Colombia

Tel. (571) 4046529
- **Information department:**
Department: Regulatory Affairs of Chrysal International BV, the Netherlands
Chrysal Americas 1-800-247-9725
- **Emergency telephone number:**
ChemTel Inc. 1-800-255-3924 Int. +01-813-248-0585
Tel.: (57) 3165281657

2 Hazard(s) identification

- **Classification of the substance or mixture**
Skin Irrit. 2 H315 Causes skin irritation.
Eye Irrit. 2A H319 Causes serious eye irritation.
Skin Sens. 1 H317 May cause an allergic skin reaction.
Aquatic Chronic 3 H412 Harmful to aquatic life with long lasting effects.
- **Label elements**
- **GHS label elements**
The product is classified and labeled according to the Globally Harmonized System (GHS).
- **Hazard pictograms**



GHS07

- **Signal word** Warning
- **Hazard-determining components of labeling:**
alkyl alcohol etoxylated
mixture of: 5-chloro-2-methyl-2 H -isothiazol-3-one [EC No 247-500-7] and 2-methyl-2 H -isothiazol-3-one [EC No 220-239-6] (3:1)

(Contd. on page 2)

USA

Safety Data Sheet acc. to OSHA HCS

Printing date 05/21/2015

Version: 3

Reviewed on 05/21/2015

(Contd. of page 1)

· **Hazard statements**

- H315 Causes skin irritation.
- H319 Causes serious eye irritation.
- H317 May cause an allergic skin reaction.
- H412 Harmful to aquatic life with long lasting effects.

· **Precautionary statements**

- P280 Wear protective gloves / eye protection.
- P280 Wear protective clothing.
- P273 Avoid release to the environment.
- P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
- P337+P313 If eye irritation persists: Get medical advice/attention.
- P302+P352 If on skin: Wash with plenty of water.

· **Classification system:**

· **NFPA ratings (scale 0 - 4)**



· **HMIS-ratings (scale 0 - 4)**

HEALTH	1	Health = 1
FIRE	0	Fire = 0
REACTIVITY	0	Reactivity = 0

· **Other hazards**

· **Results of PBT and vPvB assessment**

- **PBT:** Not applicable.
- **vPvB:** Not applicable.

3 Composition/information on ingredients

· **Chemical characterization: Mixtures**

· **Description:** Mixture of substances with nonhazardous additions.

· **Dangerous components:**

77-92-9	citric acid	≥10<25%
69011-36-5	alkyl alcohol etoxylated	≥5<10%
55965-84-9	mixture of: 5-chloro-2-methyl-2 H -isothiazol-3-one [EC No 247-500-7] and 2-methyl-2 H -isothiazol-3-one [EC No 220-239-6] (3:1)	0.1-<0.25%

4 First-aid measures

· **Description of first aid measures**

· **After inhalation:** No special measures required

· **After skin contact:**

- Rinse with warm water.
- If skin irritation continues, consult a doctor.

· **After eye contact:**

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

· **After swallowing:** Rinse mouth with water and drink one or two glasses of water.

(Contd. on page 3)

Safety Data Sheet
acc. to OSHA HCS

Printing date 05/21/2015

Version: 3

Reviewed on 05/21/2015

(Contd. of page 2)

- **Most important symptoms and effects, both acute and delayed**
Exposure to isothiazolinones may cause allergic skin reaction in susceptible people. Skin reactions usually occur after 24 hours or more after exposure. Sometimes mucosal irritation and respiratory problems can occur
- **Indication of any immediate medical attention and special treatment needed** Symptomatic treatment

5 Fire-fighting measures

- **Extinguishing media**
- **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.
- **Advice for firefighters**
- **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 to enter sewers/ surface or ground water.
- **Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
- **Reference to other sections**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

* 7 Handling and storage

- **Precautions for safe handling** No special precautions are necessary if used correctly.
- **Information about protection against explosions and fires:** No special measures required.
- **Conditions for safe storage, including any incompatibilities**
- **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.
- **Control parameters**
- **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.
- **Exposure controls**
- **Personal protective equipment:**
- **General protective and hygienic measures:**
The usual precautionary measures for handling chemicals should be followed.
Keep away from foodstuffs, beverages and feed.
Wash hands before breaks and at the end of work.
Avoid contact with the eyes and skin.

(Contd. on page 4)

Safety Data Sheet
acc. to OSHA HCS

Printing date 05/21/2015

Version: 3

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(Contd. of page 3)

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



Protective gloves

- **Material of gloves**

Short-term use: Chemical protective gloves with CE mark that comply with the standard (low chemical resistant / waterproof).

Use chemical resistant gloves classified under standard EN 374 when prolonged or frequently repeated contact could occur.

Recommended thickness of the material: ≥ 0.12 mm.

Suitable glove material is e. g:

Nitrile rubber, NBR

Neoprene gloves

- **Penetration time of glove material**

Not applicable to gloves that meet the standard EN-374-1.

For protective gloves that meet the standard EN 374 breakthrough time > 60 minutes (Protection Index Class 3 or higher).

Check before each use the protective gloves for damage.

Wear protective gloves no longer than necessary.

- **Eye protection:**



Tightly sealed goggles

- **Limitation and supervision of exposure into the environment**

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

9 Physical and chemical properties

- **Information on basic physical and chemical properties**

- **General Information**

- **Appearance:**

Form:	Fluid
Color:	Colorless
Odor:	Odorless

- **pH-value at 20 °C (68 °F):** 1.2

- **Change in condition**

Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	100 °C (212 °F)

- **Flash point:** Not applicable.

- **Ignition temperature:** 1010 °C (1850 °F)

- **Auto igniting:** Product is not selfigniting.

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

- **Vapor pressure at 20 °C (68 °F):** 23 hPa (17 mm Hg)

- **Density at 20 °C (68 °F):** 1.043 g/cm³ (8.704 lbs/gal)

(Contd. on page 5)

Safety Data Sheet
acc. to OSHA HCS

Printing date 05/21/2015

Version: 3

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(Contd. of page 4)

- **Solubility in / Miscibility with Water:** Fully miscible.
- **Solvent content:**
 - **Organic solvents:** 0.0 %
 - **Water:** 69.7 %
- **Other information** No further relevant information available.

10 Stability and reactivity

- **Reactivity**
- **Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Possibility of hazardous reactions** No dangerous reactions known.
- **Conditions to avoid** No further relevant information available.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** No dangerous decomposition products known.

11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:**
- **LD/LC50 values that are relevant for classification:**
The product has not been tested. The values listed below are derived from the properties of the individual components:
 - Oral LD50 (rat): > 5000 mg/kg
 - Dermal LD50 (rabbit): > 5000 mg/kg
 - Inhalation LC50 (rat): > 5000 mg/l
- **Primary irritant effect:**
 - **on the skin:** Irritating (OECD 404)
 - **on the eye:** Irritating (OECD 438)
- **Sensitization:** Sensitization possible through skin contact.
- **Additional toxicological information:**
- **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

- **Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **Persistence and degradability** No further relevant information available.
- **Bioaccumulative potential** No further relevant information available.
- **Mobility in soil** No further relevant information available.

(Contd. on page 6)

Safety Data Sheet
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Printing date 05/21/2015

Version: 3

Reviewed on 05/21/2015

(Contd. of page 5)

- **Additional ecological information:**
- **General notes:**
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.
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Other adverse effects** No further relevant information available.

13 Disposal considerations

- **Waste treatment methods**
- **Recommendation:**
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.
Packaging can be reused or recycled after cleaning.
- **Recommended cleansing agent:** Water, if necessary with cleaning agents.

14 Transport information

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

USA

(Contd. on page 7)

Safety Data Sheet
acc. to OSHA HCS

Printing date 05/21/2015

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(Contd. of page 6)

15 Regulatory information

- Safety, health and environmental regulations/legislation specific for the substance or mixture
- Sara

· **Section 355 (extremely hazardous substances):**

None of the ingredient is listed.

· **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.

· **Carcinogenity 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.

· **GHS label elements**

The product is classified and labeled according to the Globally Harmonized System (GHS).

· **Hazard pictograms**



GHS07

· **Signal word** Warning

· **Hazard-determining components of labeling:**

alkyl alcohol etoxylated

mixture of: 5-chloro-2-methyl-2 H -isothiazol-3-one [EC No 247-500-7] and 2-methyl-2 H -isothiazol-3-one [EC No 220-239-6] (3:1)

· **Hazard statements**

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(Contd. on page 8)

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(Contd. of page 7)

Precautionary statements

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- P280 Wear protective clothing.
- P273 Avoid release to the environment.
- P305+P351+P338 *If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.*
- P333+P313 *If skin irritation or rash occurs: Get medical advice/attention.*
- P337+P313 *If eye irritation persists: Get medical advice/attention.*
- P302+P352 *If on skin: Wash with plenty of water.*
- **Chemical safety assessment** *For this product a chemical safety assessment has not been carried out.*
- **Chemical safety assessment:** *A Chemical Safety Assessment has not been carried out.*

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.

Department issuing SDS:

*Chrysal International BV, the Netherlands
Department: Product Safety & Regulatory Affairs*

Date of preparation / last revision 05/21/2015 / 2

Abbreviations and acronyms:

- ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)*
- IMDG: International Maritime Code for Dangerous Goods*
- DOT: US Department of Transportation*
- IATA: International Air Transport Association*
- ACGIH: American Conference of Governmental Industrial Hygienists*
- EINECS: European Inventory of Existing Commercial Chemical Substances*
- ELINCS: European List of Notified Chemical Substances*
- CAS: Chemical Abstracts Service (division of the American Chemical Society)*
- NFPA: National Fire Protection Association (USA)*
- HMIS: Hazardous Materials Identification System (USA)*
- Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2*
- Eye Irrit. 2A: Serious eye damage/eye irritation, Hazard Category 2A*
- Skin Sens. 1: Sensitisation - Skin, Hazard Category 1*
- Aquatic Chronic 3: Hazardous to the aquatic environment - Chronic Hazard, Category 3*

*** Data compared to the previous version altered.**