Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II / Regulation (EU) No. 2015/830. - Netherlands

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# SAFETY DATA SHEET

## YaraTera Kristalon 7.5-12-36 Scarlet

## **SECTION 1: Identification of the substance/mixture and of** the company/undertaking

## **1.1** Product identifier

Product name Product code Product type

YaraTera Kristalon 7.5-12-36 Scarlet

PK403K 2

#### Solid 2

2

## **1.2** Relevant identified uses of the substance or mixture and uses advised against

| Identified uses  |
|--|
| Industrial distribution.<br>Industrial USE to formulate chemical product mixtures.<br>Professional formulation of fertiliser products.<br>Professional USE as fertiliser at Farm - loading and spreading.<br>Professional USE as fertiliser in Greenhouse.<br>Professional USE as liquid fertiliser in open field.<br>Professional USE as fertiliser - maintenance of equipment. |

| Uses advised against | : Other non-specified industry                            |
|----------------------|---|
| Reason               | : Due to lack of related experience or data, the supplier |
|                      | cannot approve this use.                                  |

## **1.3** Details of the supplier of the safety data sheet

|                  | Yara Vlaardingen B.V. |
|------------------|-----------------------|
| Address          | Ū.                    |
| Street           | : Zevenmanshaven Oost |
| Number           | : 67                  |
| Postal code      | : 3133 CA             |
| City             | : Vlaardingen         |
| Country          | : Netherlands         |
| Telephone number | : +31 10 445 2000     |
| -                |                       |

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| Fax no.                  | <br>31 10 445 2009     |
|--------------------------|------------------------|
| e-mail address of person | <br>yaraquest@yara.com |
| responsible for this SDS |                        |

### **<u>1.4</u>** Emergency telephone number

| National advisory body/Poison Center                                       |   |   |
|--|---|---|
| Name<br>Telephone number   |   | Nationaal Vergiftigings Informatie Centrum<br>+31 (0) 30 274 88 88 Uitsluitend bestemd om<br>professionele hulpverleners te informeren bij acute<br>vergiftigingen. <b>(Only intended to inform professionals</b> |
| Hours of operation   | : | <b>in acute poisonings.)</b><br>24h   |
| <u>Supplier</u><br>Emergency telephone number<br>(with hours of operation) | : | +44 1235239670<br>24 h  |

## **SECTION 2: Hazards identification**

## 2.1 Classification of the substance or mixture.

Product definition : Mixture

## Classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

### Classification

: Ox. Sol. 3, H272

The product is classified as hazardous according to Regulation (EC) 1272/2008 as amended.

See Section 16 for the full text of the H statements declared above. See Section 11 for more detailed information on health effects and symptoms.

### 2.2 Label elements

| Hazard pictograms          | : |                |  |
|----------------------------|---|----------------|--|
| Signal word                | : | Warning        |  |
| Hazard statements          | : | H272           | May intensify fire; oxidizer.  |
| Precautionary statements   |   |                |  |
| Prevention                 | : | P210           | Keep away from heat, hot surfaces, sparks,<br>open flames and other ignition sources. No<br>smoking. |
|                            |   | P220           | Keep away from clothing and other combustible materials.   |
| Response                   | : | P370<br>P378-b | In case of fire:<br>Use flooding quantities of water to  |
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extinguish.

| EU Regulation (EC) No.<br>1907/2006 (REACH) Annex XVII<br>- Restrictions on the<br>manufacture, placing on the<br>market and use of certain<br>dangerous substances,<br>mixtures and articles | : | Not applicable.  |
|---|---|--|
| Special packaging requirements  |   |  |
| Containers to be fitted with  | : | Not applicable.  |
| child-resistant fastenings<br>Tactile warning of danger   | : | Not applicable.  |
| 2.3 Other hazards   |   |  |
| Product meets the<br>criteria for PBT or vPvB: This n<br>PBT of<br>PBT of<br>PBT of<br>according to<br>Regulation (EC) No.<br>1907/2006, Annex XIII   |   | re does not contain any substances that are assessed to be a<br>PvB. |
| Other hazards which do not result in classification   | : | None known.  |
| Additional information  | : | Product forms slippery surface when combined with water.             |

## **SECTION 3: Composition/information on ingredients**

3.2 Mixtures

: Mixture

| Product/ingredient<br>name | Identifiers   | %                  | Regulation (EC) No. 1272/2008 [CLP] | Туре |
|----------------------------|---|--------------------|-------------------------------------|------|
| potassium nitrate          | RRN:<br>01-2119488224-<br>35<br>EC:<br>231-818-8<br>CAS :<br>7757-79-1                            | >= 50 -<br><= 65   | Ox. Sol. 3, H272                    | [1]  |
| boric acid                 | RRN:<br>01-2119486683-<br>25<br>EC:<br>233-139-2<br>CAS :<br>10043-35-3<br>Index:<br>005-007-00-2 | >= 0,1 -<br><= 0,2 | Repr. 1B, H360                      | [1]  |

<u>Type</u>

[1] Substance classified with a physical, health or environmental hazard

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[2] Substance with a workplace exposure limit

[3] Substance meets the criteria for PBT according to Regulation (EC) No. 1907/2006, Annex XIII

[4] Substance meets the criteria for vPvB according to Regulation (EC) No. 1907/2006, Annex XIII

[5] Substance of equivalent concern

See Section 16 for the full text of the H statements declared above.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment, are PBTs, vPvBs or Substances of equivalent concern, or have been assigned a workplace exposure limit and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

ŝ,

This product contains Boron (see section 7 and 11). The content is below the level required for classification of the product as toxic to reproduction.

## **SECTION 4: First aid measures**

### 4.1 Description of first aid measures

| Eye contact  | :     | Rinse with plenty of running water. Check for and remove any contact lenses. Get medical attention if irritation occurs.   |  |  |
|--|-------|--|--|--|
| Inhalation   | :     | If inhaled, remove to fresh air. In case of inhalation of<br>decomposition products in a fire, symptoms may be delayed. Get<br>medical attention if you feel unwell. The exposed person may<br>need to be kept under medical surveillance for 48 hours.          |  |  |
| Skin contact   | :     | Wash with soap and water. Get medical attention if irritation develops.  |  |  |
| Ingestion  | :     | Wash out mouth with water. If material has been swallowed and<br>the exposed person is conscious, give small quantities of water<br>to drink. Do not induce vomiting unless directed to do so by<br>medical personnel. Get medical attention if you feel unwell. |  |  |
| Protection of first-aiders   | :     | No action shall be taken involving any personal risk or without suitable training.   |  |  |
| 4.2 Most important symptoms a  | nd e  | effects, both acute and delayed  |  |  |
| Over-exposure signs/symptoms   | 5     |  |  |  |
| Eye contact  | · • • | No specific data.  |  |  |
| Inhalation   | ÷.    | No specific data.  |  |  |
| Skin contact   | 11    |  |  |  |
|  | 1     | No specific data.  |  |  |
| Ingestion  | ÷.,   | No specific data.  |  |  |
| 4.3 Indication of any immediate medical attention and special treatment needed |       |  |  |  |
| ine incloation of any initioalate  |       |  |  |  |
| Notes to physician   | :     | Treat symptomatically. Contact poison treatment specialist<br>immediately if large quantities have been ingested or inhaled. In<br>case of inhalation of decomposition products in a fire, symptoms  |  |  |
|  |       |  |  |  |

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may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

Specific treatments

No specific treatment.

## **SECTION 5: Firefighting measures**

#### 5.1 Extinguishing media Suitable extinguishing media Use flooding quantities of water for extinction. 2 Unsuitable extinguishing ÷ Do NOT use chemical extinguisher or foam or attempt to media smother the fire with steam or sand. 5.2 Special hazards arising from the substance or mixture Hazards from the substance or : Oxidizing material. May intensify fire. The product itself is not mixture combustible but it can support combustion, even in absence of air. On heating it melts and further heating can cause decomposition, releasing toxic fumes containing nitrogen oxides. It has high resistance to detonation. Heating under strong confinement can lead to explosive behaviour. Hazardous combustion Decomposition products may include the following 5 products materials: nitrogen oxides, sulfur oxides, phosphorus oxides, metal oxide/oxides, ammonia, Avoid breathing dusts, vapors or fumes from burning materials., In case of inhalation of decomposition products in a fire, symptoms may be delayed. **5.3 Advice for firefighters** Special protective actions for Promptly isolate the scene by removing all persons from the fire-fighters vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool. Special protective equipment Fire-fighters should wear appropriate protective equipment for fire-fighters and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.

## **SECTION 6: Accidental release measures**

### 6.1 Personal precautions, protective equipment and emergency procedures

| For non-emergency personnel | : | No action shall be taken involving any personal risk or without<br>suitable training. Evacuate surrounding areas. Keep<br>unnecessary and unprotected personnel from entering. Do not<br>touch or walk through spilled material. Shut off all ignition |
|-----------------------------|---|--|
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|                                    |      | sources. No flares, smoking or flames in hazard area. Provide<br>adequate ventilation. Wear appropriate respirator when<br>ventilation is inadequate. Put on appropriate personal<br>protective equipment (see Section 8).  |
|------------------------------------|------|---|
| For emergency responders           | :    | If specialized clothing is required to deal with the spillage, take<br>note of any information in Section 8 on suitable and unsuitable<br>materials. See also the information in "For non-emergency<br>personnel".  |
| 6.2 Environmental precautions      | :    | Avoid dispersal of spilled material and runoff and contact with<br>soil, waterways, drains and sewers. Inform the relevant<br>authorities if the product has caused environmental pollution<br>(sewers, waterways, soil or air).  |
| 6.3 Methods and materials for con  | ntai | inment and cleaning up  |
| Small spill                        | :    | Move containers from spill area. If contaminated with<br>combustible material or reactive chemicals, use spark-proof<br>tools and explosion-proof equipment. Vacuum dust with<br>equipment fitted with a HEPA filter and place in a closed,<br>labeled waste container. Dispose of via a licensed waste<br>disposal contractor.   |
| Large spill                        | :    | Move containers from spill area. If contaminated with<br>combustible material or reactive chemicals, use spark-proof<br>tools and explosion-proof equipment. Approach release from<br>upwind. Prevent entry into sewers, water courses, basements<br>or confined areas. Avoid dust generation. Do not dry sweep.<br>Vacuum dust with equipment fitted with a HEPA filter and<br>place in a closed, labeled waste container. Dispose of via a<br>licensed waste disposal contractor. |
| 6.4 Reference to other<br>sections | :    | See Section 1 for emergency contact information.<br>See Section 8 for information on appropriate personal<br>protective equipment.<br>See Section 13 for additional waste treatment information.  |

## **SECTION 7: Handling and storage**

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

## 7.1 Precautions for safe handling

Not for human or animal consumption.

| Protective measures        | : Put on appropriate personal protective equipment (see<br>Section 8). As a precaution, keep exposure as low as possible<br>for pregnant women, children and workers in reproductive<br>age. Avoid dust generation. Do not breathe dust. Do not<br>ingest. Avoid contact with eyes, skin and clothing. Keep in the |
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original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Keep away from clothing, incompatible materials and combustible materials. Keep away from heat. Empty containers retain product residue and can be hazardous. Do not reuse container.

# Advice on general occupational hygiene

Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

## 7.2 Conditions for safe storage, including any incompatibilities

Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink.Separate from reducing agents and combustible materials.Keep container tightly closed and sealed until ready for use.Containers that have been opened must be carefully resealed and kept upright to prevent leakage.Do not store in unlabeled containers.Use appropriate containment to avoid environmental contamination. Keep away from: organic materials, oil and grease.

## Seveso Directive - Reporting thresholds

### Danger criteria

| Category          | Notification and<br>MAPP threshold | Safety report<br>threshold |
|-------------------|------------------------------------|----------------------------|
| Potassium nitrate | 1.250 t                            | 5.000 t                    |

### 7.3 Specific end use(s)

**Recommendations** : Do not generate and inhale liquid fertilizer aerosols.

In addition to overalls, gloves and eye protection, use of efficient respiratory protection (P2/P3 respirators with a tight face seal) during discharge of fertilizer bags and maintenance of equipment is recommended to minimize inhalation exposure and to ensure safe-use during this activity (see section 8).

Risk assessments show safe use during normal spreading of fertilizers containing below 5% of boron by tractor (liquid or granular) and backpack (liquid).

## **SECTION 8: Exposure controls/personal protection**

The information in this section contains generic advice and guidance. Information is provided based on typical anticipated uses of the product. Additional measures might be required for bulk handling or other uses that could significantly increase worker exposure or environmental releases.

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|----------------------------|-----------|

## 8.1 Control parameters

### **Occupational exposure limits**

| Remark |
|--------|
|--------|

Recommended monitoring procedures

: No exposure limit value known.

: If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to monitoring standards, such as the

following: European Standard EN 689 (Workplace atmospheres -

Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy)

European Standard EN 14042 (Workplace atmospheres - Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents)

European Standard EN 482 (Workplace atmospheres - General requirements for the performance of procedures for the measurement of chemical agents)

Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

## **DNELs/DMELs**

| Product/ingredie<br>nt name | Туре | Exposure                | Value                 | Population | Effects  |
|-----------------------------|------|-------------------------|-----------------------|------------|----------|
| boric acid                  | DNEL | Long term<br>Inhalation | 8,3 mg/m <sup>3</sup> | Workers    | Systemic |
|                             | DNEL | Long term<br>Dermal     | 392 mg/kg<br>bw/day   | Workers    | Systemic |

## **PNECs**

| Product/ingredient name | Туре | Compartment Detail        | Value   | Method Detail         |
|-------------------------|------|---------------------------|---------|-----------------------|
| potassium nitrate       | PNEC | Sewage Treatment<br>Plant | 18 mg/l | Assessment<br>Factors |

### 8.2 Exposure controls

| Appropriate engineering controls                   | : | If user operations generate dust, fumes, gas, vapor or mist, use<br>process enclosures, local exhaust ventilation or other<br>engineering controls to keep worker exposure to airborne<br>contaminants below any recommended or statutory limits.  |
|--|---|--|
| Individual protection measures<br>Hygiene measures | : | A washing facility or water for eye and skin cleaning<br>purposes should be present. Wash hands, forearms and<br>face thoroughly after handling chemical products, before<br>eating, smoking and using the lavatory and at the end of<br>the working period. Wash contaminated clothing before |
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|   |   | reusing.   |
|---|---|--|
| Eye/face protection                           | : | Safety eyewear complying with an approved standard<br>should be used when a risk assessment indicates this is<br>necessary to avoid exposure to liquid splashes, mists,<br>gases or dusts.<br><b>Recommended</b> : Tightly-fitting goggles, CEN: EN166,  |
| Skin protection<br>Hand protection            | : | Chemical-resistant, impervious gloves complying with an<br>approved standard should be worn at all times when<br>handling chemical products if a risk assessment indicates<br>this is necessary. For general applications, we<br>recommend gloves with a thickness typically greater than<br>0.35 mm. It should be emphasized that glove thickness is<br>not necessarily a good predictor of glove resistance to a<br>specific chemical, as the permeation efficiency of the<br>glove will be dependent on the exact composition of the<br>glove material. |
| Body protection                               | : | Personal protective equipment for the body should be selected based on the task being performed and the risks involved.  |
| Other skin protection                         | : | Appropriate footwear and any additional skin protection<br>measures should be selected based on the task being<br>performed and the risks involved and should be approved<br>by a specialist before handling this product.   |
| Respiratory protection                        | : | Use respiratory protection with more than 94% efficiency (P2, P3 or N95) and a tight face seal, when risk of exposure to dust.   |
| Environmental exposure<br>controls            | : | Emissions from ventilation or work process equipment<br>should be checked to ensure they comply with the<br>requirements of environmental protection legislation.<br>In some cases, fume scrubbers, filters or engineering<br>modifications to the process equipment will be necessary<br>to reduce emissions to acceptable levels.  |
| Personal protective equipment<br>(Pictograms) | : |  |

# **SECTION 9: Physical and chemical properties**

## 9.1 Information on basic physical and chemical properties

| <u>Appearance</u>            |                          |           |
|------------------------------|--------------------------|-----------|
| Physical state               | : Solid                  |           |
| Color                        | : Not determined.        |           |
| Odor                         | : Not determined.        |           |
| Odor threshold               | : Not determined.        |           |
| рН                           | : 4 - 5 [Conc.: 100 g/l] |           |
| Melting point/freezing point | : Not determined         |           |
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| Initial boiling point and boiling range | :  | Not determined            |
|---|----|---------------------------|
| Flash point                             |    | Not determined            |
| Evaporation rate                        | 10 | Not determined            |
| Flammability (solid, gas)               | +  | Non-flammable.            |
| Upper/lower flammability or             |    | Lower: Not determined     |
| explosive limits                        |    | Upper: Not determined     |
| Vapor pressure                          | 10 | Not determined            |
| Vapor density                           | 10 | Not determined            |
| Relative density                        | 10 | Not determined            |
| Bulk density                            | 10 | Not determined            |
| Partition coefficient: n-               | 10 | Not determined            |
| octanol/water                           |    |                           |
| Auto-ignition temperature               | 1  | Not determined            |
| Viscosity                               | 10 | Dynamic: Not determined.  |
| -                                       |    | Kinematic:Not determined. |
| Explosive properties                    | 1  | Non-explosive.            |
| Oxidizing properties                    |    | Oxidizer                  |
|   |    |                           |

## 9.2 Other information

No additional information.

## **SECTION 10: Stability and reactivity**

#### 10.1 Reactivity 2 No specific test data related to reactivity available for this product or its ingredients. **10.2** Chemical stability The product is stable. 5 **10.3** Possibility of hazardous Hazardous reactions or instability may occur under certain ÷. reactions conditions of storage or use. Conditions may include the following: contact with combustible materials Reactions may include the following: risk of causing or intensifying fire **10.4 Conditions to avoid** 2 Avoid contamination by any source including metals, dust and organic materials. **10.5** Incompatible materials Reactive or incompatible with the following materials: 1 alkalis, combustible materials, reducing materials, organic materials, Acids 10.6 Hazardous Under normal conditions of storage and use, hazardous ÷ decomposition products decomposition products should not be produced.

## **SECTION 11: Toxicological information**

## 11.1 Information on toxicological effects

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## Acute toxicity

| Product/ingredie<br>nt name | Method      | Species | Result                 | Exposure           | References |
|-----------------------------|-------------|---------|------------------------|--------------------|------------|
| potassium nitrate           |             |         |                        |                    |            |
|                             | LD50 Oral   | Rat     | 2.000 - 5.000<br>mg/kg | Not<br>applicable. | CSR        |
|                             | LD50 Dermal | Rat     | > 5.000 mg/kg          | Not<br>applicable. | CSR        |
| boric acid                  |             |         |                        |                    |            |
|                             | LD50 Oral   | Rat     | 3.450 mg/kg            | Not<br>applicable. | IUCLID 5   |
|                             | LD50 Dermal | Rabbit  | > 5.000 mg/kg          | Not<br>applicable. | IUCLID     |

## Conclusion/Summary

: No known significant effects or critical hazards.

## Acute toxicity estimates

N/A

## Irritation/Corrosion

| Product/ingredient name                  | Method           | Species      | Result              | Exposure                                   | References |  |
|--|------------------|--------------|---------------------|--|------------|--|
| potassium nitrate                        |                  |              |                     |  |            |  |
|  | OECD 404<br>Skin | Rabbit       | Non-<br>irritating. |  | IUCLID 5   |  |
| Conclusion/Summar<br>Skin                | y<br>:           | No known sig | nificant effects    | or critical hazards                        |            |  |
| Eyes<br>Respiratory                      |                  | No known sig | nificant effects    | or critical hazards                        | 6.         |  |
| Sensitization                            |                  | NO KHOWH SIG |                     |  |            |  |
| Conclusion/Summar<br>Skin<br>Respiratory | y<br>:<br>:      |              |                     | or critical hazards<br>or critical hazards |            |  |
| <b>Mutagenicity</b>                      |                  |              |                     |  |            |  |
| Conclusion/Summar                        | y :              | No known sig | nificant effects    | or critical hazards                        | S.         |  |
| <b>Carcinogenicity</b>                   |                  |              |                     |  |            |  |
| Conclusion/Summar                        | y :              | No known sig | nificant effects    | or critical hazards                        | <b>.</b>   |  |

## Reproductive toxicity

| Product/ingredient name | Method | Species | Result                                 | Exposure                     | References |
|-------------------------|--------|---------|--|------------------------------|------------|
| boric acid              |        |         |  |                              |            |
|                         | Oral   | Rat     | Fertility effects-<br>Positive<br>NOEL | 3 weeks<br>Repeated<br>dose; | IUCLID 5   |

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|----------------------------|------------|

| Conclusion/Summary :   |                         | Contains boron which may harm fertility, based on animal data. Contains boron which may harm the unborn child, based on animal data.  |  |  |  |
|--|-------------------------|---|--|--|--|
| Information on the likely routes of exposure:  | :                       | Not available.  |  |  |  |
| Potential acute health effects   |                         |   |  |  |  |
| Inhalation   | :                       | Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.  |  |  |  |
| Ingestion  | :                       | No known significant effects or critical hazards.   |  |  |  |
| Skin contact   | :                       | No known significant effects or critical hazards.   |  |  |  |
| Eye contact  | :                       | No known significant effects or critical hazards.   |  |  |  |
| Symptoms related to the physic   | ical, c                 | hemical and toxicological characteristics   |  |  |  |
| Inhalation :<br>Ingestion :<br>Skin contact :<br>Eye contact :   |                         | No specific data.<br>No specific data.  |  |  |  |
|  |                         | No specific data.<br>No specific data.  |  |  |  |
| Eye contact<br>Delayed and immediate effects   | s and a                 |   |  |  |  |
| Eye contact  | s and a                 | No specific data.   |  |  |  |
| Eye contact<br>Delayed and immediate effects<br>Short term exposure  | s and a<br>:<br>:       | No specific data.   |  |  |  |
| Eye contact<br><u>Delayed and immediate effects</u><br><u>Short term exposure</u><br>Potential immediate effects   | :                       | No specific data.<br>also chronic effects from short and long term exposure<br>No known significant effects or critical hazards.  |  |  |  |
| Eye contact<br><u>Delayed and immediate effects</u><br><u>Short term exposure</u><br>Potential immediate effects<br>Potential delayed effects<br><u>Long term exposure</u>   | :                       | No specific data.<br>also chronic effects from short and long term exposure<br>No known significant effects or critical hazards.<br>No known significant effects or critical hazards.   |  |  |  |
| Eye contact<br><u>Delayed and immediate effects</u><br><u>Short term exposure</u><br>Potential immediate effects<br>Potential delayed effects<br><u>Long term exposure</u><br>Potential immediate effects  | : : : :                 | No specific data.<br>also chronic effects from short and long term exposure<br>No known significant effects or critical hazards.<br>No known significant effects or critical hazards.<br>No known significant effects or critical hazards.  |  |  |  |
| Eye contact<br><u>Delayed and immediate effects</u><br><u>Short term exposure</u><br>Potential immediate effects<br>Potential delayed effects<br><u>Long term exposure</u><br>Potential immediate effects<br>Potential delayed effects   | : : : :                 | No specific data.<br>also chronic effects from short and long term exposure<br>No known significant effects or critical hazards.<br>No known significant effects or critical hazards.<br>No known significant effects or critical hazards.  |  |  |  |
| Eye contact<br><u>Delayed and immediate effects</u><br><u>Short term exposure</u><br>Potential immediate effects<br>Potential delayed effects<br><u>Long term exposure</u><br>Potential immediate effects<br>Potential delayed effects<br><u>Potential chronic health effects</u>                                    | :<br>:<br>:<br><u>s</u> | No specific data.<br>also chronic effects from short and long term exposure<br>No known significant effects or critical hazards.<br>No known significant effects or critical hazards.<br>No known significant effects or critical hazards.<br>No known significant effects or critical hazards.   |  |  |  |
| Eye contact<br><u>Delayed and immediate effects</u><br><u>Short term exposure</u><br>Potential immediate effects<br>Potential delayed effects<br><u>Long term exposure</u><br>Potential immediate effects<br>Potential delayed effects<br><u>Potential chronic health effects</u><br>Carcinogenicity                 | :<br>:<br>:<br><u>s</u> | No specific data.<br>also chronic effects from short and long term exposure<br>No known significant effects or critical hazards.<br>No known significant effects or critical hazards.  |  |  |  |
| Eye contact<br><u>Delayed and immediate effects</u><br><u>Short term exposure</u><br>Potential immediate effects<br>Potential delayed effects<br><u>Long term exposure</u><br>Potential immediate effects<br>Potential delayed effects<br><u>Potential chronic health effects</u><br>Carcinogenicity<br>Mutagenicity | :<br>:<br>:<br><u>s</u> | No specific data.<br>also chronic effects from short and long term exposure<br>No known significant effects or critical hazards.<br>No known significant effects or critical hazards.<br>Contains boron which may harm fertility, based on animal  |  |  |  |
| Eye contact<br>Delayed and immediate effects<br>Short term exposure<br>Potential immediate effects<br>Potential delayed effects<br>Long term exposure<br>Potential immediate effects<br>Potential delayed effects<br>Potential delayed effects<br>Carcinogenicity<br>Mutagenicity<br>Fertility effects               | :<br>:<br>:<br>:        | No specific data.<br>also chronic effects from short and long term exposure<br>No known significant effects or critical hazards.<br>No known significant effects or critical hazards.<br>Contains boron which may harm fertility, based on animal data.<br>Contains boron which may harm the unborn child, based |  |  |  |

Other information

Not available.

## **SECTION 12: Ecological information**

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## 12.1 Toxicity

| Product/ingred<br>ient name | Method      | Species | Result       | Exposure | References |
|-----------------------------|-------------|---------|--------------|----------|------------|
| potassium nitrate           |             |         |              |          |            |
|                             | OECD 203    | Fish    | > 100 mg/l   | 96 h     | CSR        |
|                             | Acute LC50  |         | _            |          |            |
|                             | Fresh water |         |              |          |            |
|                             | Acute EC50  | Daphnia | 490 mg/l     | 48 h     | CSR        |
|                             | Fresh water |         |              |          |            |
|                             | Acute EC50  | Algae   | > 1.700 mg/l | 240 h    | CSR        |
|                             | Fresh water |         |              |          |            |
| boric acid                  |             |         |              |          | •          |
|                             | Acute LC50  | Fish    | > 100 mg/l   | 4 d      | IUCLID     |
|                             | Fresh water |         |              |          |            |
|                             | Acute EC50  | Daphnia | > 100 mg/l   | 2 d      | IUCLID     |
|                             | Fresh water |         | J J          |          |            |

Conclusion/Summary

: No known significant effects or critical hazards.

## 12.2 Persistence and degradability

Conclusion/Summary

: No known significant effects or critical hazards.

## 12.3 Bioaccumulative potential

| Product/ingredient name | LogPow     | BCF             | Potential |
|-------------------------|------------|-----------------|-----------|
| boric acid              | 0,175-1,09 | Not applicable. | low       |

**Conclusion/Summary** : No known significant effects or critical hazards.

## 12.4 Mobility in soil

|                   | : | Not available. |
|-------------------|---|----------------|
| (KOC)<br>Mobility | : | Not available. |

## 12.5 Results of PBT and vPvB assessment

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

## **<u>12.6 Other adverse effects</u>** : No known significant effects or critical hazards.

## **SECTION 13: Disposal considerations**

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

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|----------------------------|------------|
|----------------------------|------------|

## 13.1 Waste treatment methods

| Product<br>Methods of disposal | : The generation of waste should be avoided or minimized<br>wherever possible. Disposal of this product, solutions and<br>any by-products should at all times comply with the<br>requirements of environmental protection and waste<br>disposal legislation and any regional local authority<br>requirements. Dispose of surplus and non-recyclable<br>products via a licensed waste disposal contractor. Waste<br>should not be disposed of untreated to the sewer unless<br>fully compliant with the requirements of all authorities with |  |
|--------------------------------|---|--|
| Hazardous waste                | jurisdiction.<br>: Yes.   |  |

## European waste catalogue (EWC)

| Waste code  |  | Waste designation  |  |  |
|---|--|--|--|--|
| 06 10 02*   |  | wastes containing hazardous substances   |  |  |
| when<br>when<br>incir<br>recy<br>remo<br>may  |  | e generation of waste should be avoided or minimized<br>erever possible. Waste packaging should be recycled.<br>ineration or landfill should only be considered when<br>cycling is not feasible. Empty the bag by shaking to<br>nove as much as possible of its contents. Empty bags<br>by be disposed of as non-hazardous material or<br>urned for recycling. |  |  |
| Special precautions : This r<br>safe v<br>Care<br>that h<br>Empt<br>residu<br>Avoid |  | e should be taken when handling emptied containers<br>have not been cleaned or rinsed out.<br>ty containers or liners may retain some product  |  |  |

# **SECTION 14: Transport information**

| Regulation: ADR/RID             |   |
|---------------------------------|---|
| 14.1 UN number                  | 1479  |
| 14.2 UN proper shipping name    | OXIDIZING SOLID, N.O.S. (Potassium nitrate, ) |
| 14.3 Transport hazard class(es) | 5.1   |
|                                 |   |
| 14.4 Packing group              |   |
| 14.5 Environmental hazards      | No.   |
| Г                               |   |

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| Additional information       |       |
|------------------------------|-------|
| Hazard identification number | : 50  |
| <u>Tunnel code</u>           | : (E) |
| Regulation: ADN              |       |

| Regulation: ADN                 |   |
|---------------------------------|---|
| 14.1 UN number                  | 1479  |
| 14.2 UN proper shipping name    | OXIDIZING SOLID, N.O.S. (Potassium nitrate, ) |
| 14.3 Transport hazard class(es) | 5.1   |
| 14.4 Packing group              | III   |
| 14.5 Environmental hazards      | No.   |
| Additional information          |   |
| Danger code                     | : Not applicable.                             |
|                                 |   |

| Regulation: IMDG                                    |   |
|---|---|
| 14.1 UN number                                      | 1479  |
| 14.2 UN proper shipping name                        | OXIDIZING SOLID, N.O.S. (Potassium nitrate, ) |
| 14.3 Transport hazard class(es)                     | 5.1   |
| 14.4 Packing group                                  |   |
| 14.5 Environmental hazards                          | No.   |
| Additional information<br>Emergency schedules (EmS) | : F-A, S-Q                                    |

| Regulation: IATA                |   |
|---------------------------------|---|
| 14.1 UN number                  | 1479  |
| 14.2 UN proper shipping name    | OXIDIZING SOLID, N.O.S. (Potassium nitrate, ) |
| 14.3 Transport hazard class(es) | 5.1   |
| 14.4 Packing group              | Ш   |
| 14.5 Environmental hazards      | No.   |
| Additional information          |   |

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| Marine pollutant                                       | : | No.   |
|--|---|---|
| <u>14.6 Special precautions for</u><br>user            | : | Transport within user's premises: Ensure that persons transporting the product know what to do in the event of an accident or spillage. |
| 14.7 Transport in bulk according to IMO instruments    | : | Not applicable.   |
| 14.8 IMSBC   |   |   |
| Bulk cargo shipping name<br>Class<br>Group<br>Marpol V |   | OXIDIZING SOLID, N.O.S.<br>Class 5.1: Oxidizing material.<br>B<br>Non-HME   |

## **SECTION 15: Regulatory information**

# **15.1** Safety, health and environmental regulations/legislation specific for the substance or mixture

EU Regulation (EC) No. 1907/2006 (REACH)

Annex XIV - List of substances subject to authorization Annex XIV None of the components are listed. Substances of very high concern The following components are listed:

| Ingredient name | Intrinsic<br>property    | Status    | Reference<br>number | Date of revision |
|-----------------|--------------------------|-----------|---------------------|------------------|
| boric acid      | Toxic to<br>reproduction | Candidate | ED/30/2010          | 2010-06-18       |

EU Regulation (EC) No. : Not applicable. 1907/2006 (REACH) Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles

Other EU regulations Europe inventory

: All components are listed or exempted.

### Ozone depleting substances (1005/2009/EU)

None of the components are listed.

### Prior Informed Consent (PIC) (649/2012/EU)

None of the components are listed.

### **Seveso Directive**

This product is controlled under the Seveso Directive.

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## Danger criteria

| Category          |  |
|-------------------|--|
| Potassium nitrate |  |
| Other regulations | : This product is regulated by Regulation (EU) 2019/1148:<br>all suspicious transactions, and significant disappearances |

all suspicious transactions, and significant disappearances and thefts should be reported to the relevant national contact point. Please see https://ec.europa.eu/homeaffairs/sites/homeaffairs/files/what-we-do/policies/crisisand-terrorism/explosives/explosivesprecursors/docs/list\_of\_competent\_authorities\_and\_nation al\_contact\_points\_en.pdf.

## National regulations

**Biocidal products regulation** : Not applicable.

| Product name      | List name       | Name on list                              | Classification                                       | Notes            |  |
|-------------------|-----------------|---|--|------------------|--|
| boric acid        | Not applicable. | Not applicable.                           | development<br>category 1B, fertility<br>category 1B | Not applicable.  |  |
| Water Discharge   | Policy (ABM) :  | Slightly harmful to a                     | aquatic organisms., Abate                            | ement effort:, B |  |
| Notes             |                 | To our knowledge r<br>regulations are app | no other country or state s<br>licable.              | specific         |  |
| 15.2 Chemical Sat | fety :          | Complete.                                 |  |                  |  |

## **Assessment**

## **SECTION 16: Other information**

| Abbreviations and acronyms | : | ATE = Acute Toxicity Estimate<br>CLP = Classification, Labelling and Packaging Regulation<br>[Regulation (EC) No. 1272/2008]<br>DNEL = Derived No Effect Level<br>DMEL = Derived Minimal Effect Level<br>EUH statement = CLP-specific Hazard statement<br>N/A = Not available<br>PNEC = Predicted No Effect Concentration<br>RRN = REACH Registration Number<br>SGG = Segregation Group<br>PBT = Persistent, Bioaccumulative and Toxic<br>vPvB = Very Persistent and Very Bioaccumulative<br>bw = Body weight<br>EU REACH ECHA/IUCLID5 CSR. |
|----------------------------|---|---|
|                            |   | National Institute for Occupational Safety and Health, U.S. Dept. of Health, Education, and Welfare, Reports and  |
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Memoranda Registry of Toxic Effects of Chemical Substances. Sphera Solutions Inc., 4777 Levy Street, St Laurent, Quebec HAR 2P9, Canada. Regulation (EC) No 1272/2008 Annex VI.

## <u>Procedure used to derive the classification according to Regulation (EC) No. 1272/2008</u> [CLP/GHS]

| Classification   | Justification   |
|------------------|-----------------|
| Ox. Sol. 3, H272 | Expert judgment |

### Full text of abbreviated H statements

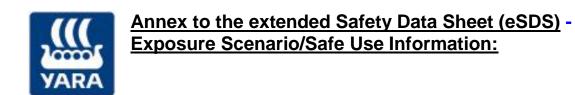
| H272 | May intensify fire; oxidizer.             |
|------|---|
| H360 | May damage fertility or the unborn child. |

## Full text of classifications [CLP/GHS]

| Ox. Sol. 3   | OXIDIZING SOLIDS - Category 3                                     |  |
|--|---|--|
| Repr. 1B   | TOXIC TO REPRODUCTION - Category 1B                               |  |
|  |   |  |
| Revision comments  | : The following sections contain new and updated information: 15. |  |
| Date of printing   | : 02.05.2022  |  |
| Date of issue/ Date of revision  | : 09.03.2021  |  |
| Date of previous issue   | : 12.07.2019  |  |
| Version  | : 6.0   |  |
| Prepared by  | : Yara Chemical Compliance (YCC).                                 |  |
| Indicates information that has changed from previously issued version. |   |  |

Notice to reader

To the best of our knowledge, the information provided in this Safety Data Sheet is accurate as at the date of its issue. The information it contains is being given for safety guidance purposes and relates only to the specific material and uses described in it. This information does not necessarily apply to that material when combined with other material(s) or when used otherwise than as described herein, since all materials may represent unknown hazards and should be used with caution. Final determination of the suitability of any material is the sole responsibility of the user.



| Identification of the subs<br>Product definition | star<br>: | nce or mixture<br>Mixture            |
|--|-----------|--------------------------------------|
| Product name                                     | :         | YaraTera Kristalon 7.5-12-36 Scarlet |
| Exposure Scenario/Safe<br>Use Information        | :         | Not applicable.                      |

## YaraTera Kristalon 7.5-12-36 Scarlet