



# SAFETY DATA SHEET

**Krista™-MAP**

## 1. Identification of the substance/preparation and of the company/undertaking

### Identification of the substance or mixture

**Product name** : Krista™-MAP  
**Chemical name** : Phosphoric acid, ammonium salt  
**Chemical formula** : NH<sub>4</sub>H<sub>2</sub>PO<sub>4</sub>

### Company/undertaking identification

**Manufacturer / Supplier** : Yara Australia Pty Ltd  
 201 Miller Street, Mezzanine Level  
 North Sydney  
 NSW 2060 Australia

Tel: +61 2 9959 4266  
 Fax: +61 2 9959 4050

**e-mail address of person responsible for this SDS** : yaraasiapacific@yara.com

**Emergency telephone number** : +61 4 1722 3075 (24h)

## 2. Hazards identification

The product is not classified as dangerous according to Directive 67/548/EEC and its amendments.

**See Section 11 for more detailed information on health effects and symptoms.**

## 3. Composition/information on ingredients

**Substance/preparation** : Substance

Ingredient name	CAS number	%	EC number	Classification
<input checked="" type="checkbox"/> Phosphoric acid, ammonium salt  <b>See Section 16 for the full text of the R-phrases declared above.</b>	10124-31-9	100	233-330-0	Not classified. [A]

**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 and hence require reporting in this section.**

**[1] Substance classified with a health or environmental hazard**

**[2] Substance with a workplace exposure limit**

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

## 4. First-aid measures

**Inhalation** : Avoid breathing dust. If inhaled, remove to fresh air.

**Ingestion** :  If large quantities of this material are swallowed, call a physician immediately. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person.

**Skin contact** : Avoid prolonged or repeated contact with skin. After handling, always wash hands thoroughly with soap and water. Get medical attention if irritation develops.

**Eye contact** : In case of contact with eyes, rinse immediately with plenty of water. Get medical attention if irritation occurs.

**Protection of first-aiders** :  No action shall be taken involving any personal risk or without suitable training.

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## 4. First-aid measures

See Section 11 for more detailed information on health effects and symptoms.

## 5. Fire-fighting measures

- Extinguishing media** : In case of fire, use water spray (fog), foam or dry chemical.
- Hazardous thermal decomposition products** : These products are nitrogen oxides phosphorus oxides
- Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment 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.

## 6. Accidental release measures

- Personal precautions** : Follow all fire-fighting procedures (section 5).
- Environmental precautions and clean-up methods** : Avoid contact of spilt material and runoff with soil and surface waterways.
- : Use a tool to scoop up solid material and place into an appropriate labelled waste container. Avoid creating dusty conditions and prevent wind dispersal. Keep out of waterways. See section 13 for waste disposal information.

**Note:** see section 8 for personal protective equipment and section 13 for waste disposal.

## 7. Handling and storage

- Handling** : Avoid the creation of dust when handling and avoid all possible sources of ignition (spark or flame). Avoid contamination by any source including metals, dust and organic materials. Prevent moisture pick-up in handling and storage.
- Storage** : Store and use away from heat, sparks, open flame or any other ignition source. Store in a dry, cool and well-ventilated area.
- Packaging materials Recommended** : Use original container.

## 8. Exposure controls/personal protection

- Occupational exposure limits** : Total inhalable dust - 10 mg/m<sup>3</sup>  
Respirable dust - 5 mg/m<sup>3</sup>
- Exposure controls**
- Respiratory protection** : Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.
- Hand protection** : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.
- Eye protection** : Use dust goggles if high dust concentration is generated.
- Skin protection** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved.
- Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period.

## 9. Physical and chemical properties

### General information

#### Appearance

- Physical state** : Solid. [Crystals.]  
**Colour** : White. Greyish-white.  
**Odour** : Odourless.

### Important health, safety and environmental information

- Boiling point** : Decomposition temperature: >210°C  
**Melting/freezing point** : 190°C  
**Density (g/cm<sup>3</sup>)** : 1.7 g/cm<sup>3</sup>  
**Solubility** : Soluble in the following materials: cold water  
**Solubility (at 20°C)** : 276 g/l

## 10. Stability and reactivity

- Stability** : Stable under recommended storage and handling conditions (see section 7).  
**Materials to avoid** : Reactive or incompatible with the following materials: acids and alkalis.  
**Hazardous decomposition products** : These products are  
nitrogen oxides  
phosphorus oxides

## 11. Toxicological information

### Potential acute health effects

Adverse health effects are considered unlikely, when the product is used according to directions.

### Potential chronic health effects

- Chronic effects** :  No known significant effects or critical hazards.  
**Carcinogenicity** : No known significant effects or critical hazards.  
**Mutagenicity** : No known significant effects or critical hazards.  
**Teratogenicity** : No known significant effects or critical hazards.  
**Developmental effects** :  No known significant effects or critical hazards.  
**Fertility effects** :  No known significant effects or critical hazards.

### Over-exposure signs/symptoms

- Inhalation** :  No specific data.  
**Ingestion** :  No specific data.  
**Skin** :  No specific data.  
**Eyes** :  No specific data.

## 12. Ecological information

- Environmental effects** :  No known significant effects or critical hazards.  
**Conclusion/Summary** : Most inorganic compounds are not biodegradable. The product does not show any bioaccumulation phenomena.  
**Other adverse effects** :  No known significant effects or critical hazards.

## 13. Disposal considerations

- Methods of disposal** : Empty containers or liners may retain some product residues. Do not empty into drains; dispose of this material and its container in a safe way. Dispose of in accordance with all applicable local and national regulations  
**Hazardous waste** : Within the present knowledge of the supplier, this product is not regarded as hazardous waste, as defined by EU Directive 91/689/EEC..

## 14. Transport information

Not regulated.

Not classified as hazardous material according to UN Orange Book and international transport codes e.g. ADR (road), RID (rail), ADN (inland waterways) and IMDG (sea).

## 15. Regulatory information

### EU regulations

**Risk phrases** : This product is not classified according to EU legislation.

**Contains EINECS number** :  Phosphoric acid, ammonium salt 233-330-0

**Product use** : Industrial applications.

Classification and labelling have been performed according to EU Directives 67/548/EEC and 1999/45/EC (including amendments) and the intended use.

**Europe inventory** :  This material is listed or exempted.

## 16. Other information

**References** : Regulation (EC) No 1272/2008 Annex VI  
EU REACH IUCLID5 CSR  
National Institute for Occupational Safety and Health, U.S. Dept. of Health, Education, and Welfare, Reports and Memoranda  
Registry of Toxic Effects of Chemical Substances  
Atrion International Inc. 4777 Levy Street, St Laurent, Quebec HAR 2P9, Canada

### History

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**Version** : 2

**Prepared by** : Yara Product Classification and Regulations

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. Final determination of the suitability of any material is the sole responsibility of the user. All materials may represent unknown hazards and should be used with caution. Yara International ASA disclaims any liability for loss or damage resulting from the use of any data, information or recommendations set out in this Safety Data Sheet.*