



# SAFETY DATA SHEET

Air1®

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

### Identification of the substance or preparation

**Product name** : Air1®  
**Synonyms** : Urea Solution 32.5%

### Company/undertaking identification

**Manufacturer / Supplier** : Yara AB  
 P.O.Box 516  
 SE-261 24 Landskrona  
 Sweden

Tel: +46 418 761 00

Fax: +46 418 583 46

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

**Emergency telephone number** : Yara, Köping +46 221 278 01 (24h) for further information

## 2. Hazards identification

The product is not classified as dangerous according to Directive 1999/45/EC and its amendments.

**Classification** : Not classified.

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

## 3. Composition/information on ingredients

**Substance/preparation** : Preparation

| Ingredient name  | CAS number | %    | EC number | Classification  |
|--|------------|------|-----------|-----------------|
| Water  | 7732-18-5  | 67.5 | 231-791-2 | Not classified. |
| Urea   | 57-13-6    | 32.5 | 200-315-5 | Not classified. |
| See section 16 for the full text of the R-phrases 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 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

**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. Wash 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.

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, dry chemical or CO<sub>2</sub>.
- Hazardous thermal decomposition products** : These products are  
carbon dioxide  
carbon monoxide  
nitrogen oxides  
Ammonia.
- 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.

## 6. Accidental release measures

- Personal precautions** : Follow all fire-fighting procedures (section 5).
- Environmental precautions and clean-up methods** : Avoid contact of spilled material and runoff with soil and water courses.
- Absorb with DRY sand or other non-combustible material. Use a tool to scoop up solid or absorbed material and place into 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 contact with eyes, skin and clothing. Ensure eyewash facilities are located close to the working environment.
- Storage** : Keep container tightly closed. Keep container in a cool, well-ventilated area. Keep away from heat and direct sunlight.
- Packaging materials Recommended** : Use original container.

## 8. Exposure controls/personal protection

### 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. Recommended: If ventilation is inadequate, use respirator that will protect against dust/mist.
- 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. Recommended: >8 hours (breakthrough time): butyl rubber , natural rubber (latex) , nitrile rubber
- Eye protection** : Recommended: Chemical splash goggles or face shield.
- 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** : Liquid. [Clear.]
- Colour** : Colourless.
- Odour** : Ammoniacal. [Slight]

### Important health, safety and environmental information

- pH** : 9,8 to 10 [Conc. (% w/w): 10%]
- Boiling point** : Decomposition temperature: 100°C

## 9. Physical and chemical properties

|                                 |  |
|---------------------------------|--|
| <b>Melting/freezing point</b>   | : -11.5°C (11.3°F)                     |
| <b>Vapour pressure</b>          | : 6.4 kPa (48 mm Hg) (at 40°C)         |
| <b>Density g/cm<sup>3</sup></b> | : 1.09 g/cm <sup>3</sup> (20°C / 68°F) |
| <b>Miscible in water.</b>       | : Yes.                                 |

## 10. Stability and reactivity

|   |  |
|---|--|
| <b>Stability</b>                        | : Stable under recommended storage and handling conditions (see section 7).                                |
| <b>Conditions to avoid</b>              | : Urea reacts with calcium hypochlorite or sodium hypochlorite to form the explosive nitrogen trichloride. |
| <b>Materials to avoid</b>               | : Highly reactive or incompatible with the following materials: oxidizing materials, acids and alkalis.    |
| <b>Hazardous decomposition products</b> | : These products are<br>carbon dioxide<br>carbon monoxide<br>nitrogen oxides<br>Ammonia.                   |

## 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

|                              |   |
|------------------------------|---|
| <b>Chronic effects</b>       | : No known significant effects or critical hazards. |
| <b>Carcinogenicity</b>       | : No known significant effects or critical hazards. |
| <b>Mutagenicity</b>          | : No known significant effects or critical hazards. |
| <b>Teratogenicity</b>        | : No known significant effects or critical hazards. |
| <b>Developmental effects</b> | : No known significant effects or critical hazards. |
| <b>Fertility effects</b>     | : No known significant effects or critical hazards. |

### Over-exposure signs/symptoms

|                   |                     |
|-------------------|---------------------|
| <b>Inhalation</b> | : No specific data. |
| <b>Ingestion</b>  | : No specific data. |
| <b>Skin</b>       | : No specific data. |
| <b>Eyes</b>       | : No specific data. |

## 12. Ecological information

**Environmental effects** : Readily biodegradable

### Other ecological information

| <b>Product/ingredient name</b> | <b><u>Aquatic half-life</u></b> | <b><u>Photolysis</u></b> | <b><u>Biodegradability</u></b> |
|--------------------------------|---------------------------------|--------------------------|--------------------------------|
| Air1®                          | -                               | -                        | Readily                        |

**Conclusion/Summary** : The product does not show any bioaccumulation phenomena.

**Mobility** : Soluble in the following materials: water

**Other adverse effects** : No known significant effects or critical hazards.

## 13. Disposal considerations

**Methods of disposal** : Consult with the local environmental authorities or an approved waste contractor to determine whether spillage or waste can be collected and reused for its original purpose.

Containers are collected for recycling. Details of recycling are given by the local recycling organisation.

## 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.

**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** :  All components are listed or exempted.

## 16. Other information

**References** : European Chemical Bureau, Annex 1 EU Directive 67/548/EEC  
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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**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.*

**Version** 5

**Page:** 4/4