



# 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 Industrial A/S  
 Røde Banke 120,  
 DK-7000 Fredericia  
 Danmark  
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**Emergency telephone number** : +45 20 25 88 45

## 2. Composition/information on ingredients

**Substance/preparation** : Preparation

Ingredient name	CAS number	%	EC number	Classification: Ingredient
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.				

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

## 3. Hazards identification

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

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

## 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. 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.

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>.
- Special exposure hazards** : Fire-fighters should wear self-contained positive pressure breathing apparatus (SCBA) and full turnout gear.
- Hazardous thermal decomposition products** : These products are carbon oxides (CO, CO<sub>2</sub>), nitrogen oxides (NO, NO<sub>2</sub> etc.), ammonia (NH<sub>3</sub>).

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## 6. Accidental release measures

- Personal precautions** : Use suitable protective equipment (section 8). 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 earth, 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 and washdown facilities are located close to the working environment.
- Storage** : Do not store above 30° C. Store in a segregated, approved and labelled area. The tank/container should be placed within a bunker able to take the whole tank/container volume. Keep container tightly closed.

## 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.
- 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.  
>8 hour(s) (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. Ensure eyewash and washdown facilities are located close to the working environment.

## 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) [Basic.]
- Boiling point** : Decomposition temperature: 100°C (212°F)
- Melting/freezing point** : -10.5°C (13.1°F)
- Vapour pressure** : 6.4 kPa (48 mm Hg) (at 20°C)
- Density g/cm<sup>3</sup>** : 1.09 g/cm<sup>3</sup> (20°C / 68°F)
- Miscible in water.** : Yes.

## 10. Stability and reactivity

- Stability** : Stable under recommended storage and handling conditions (see section 7).
- Conditions to avoid** : Urea reacts with calcium hypochlorite or sodium hypochlorite to form the explosive nitrogen trichloride.
- Materials to avoid** : Highly reactive or incompatible with the following materials: oxidizing materials, acids and alkalis.
- Hazardous decomposition products** : These products are carbon oxides (CO, CO<sub>2</sub>), nitrogen oxides (NO, NO<sub>2</sub> etc.), ammonia (NH<sub>3</sub>).

## 11. Toxicological information

### Potential acute health effects

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

## 12. Ecological information

### Ecotoxicity data

Ingredient name	Species	Period	Result
urea	Daphnia magna (EC50)	48 hour(s)	3910 mg/l
	Poecilia reticulata (LC50)	96 hour(s)	17500 mg/l

- Mobility** : Soluble in water
- Adverse effects** : The product is not expected to harm the environment when used properly according to directions.
- Remarks** : The product does not show any bioaccumulation phenomena.

## 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

- 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.

### National regulations

- Risk phrases** : Not regulated.

## 16. Other information

### History

**Date of issue** : 2006-11-17.

**Date of previous issue** : 2006-03-21.

**Version** : 2.05

▣ 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.*

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