



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 : Yara Industrial
 Immingham
 North East Lincolnshire
 DN40 2NS
 United Kingdom
 T: +44 (0) 1469 554700
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Emergency Telephone : 0800 7312058 (24 hrs)

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.

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.

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 CO₂.
- Suitable** : Use an extinguishing agent suitable for the surrounding fire.
- Hazardous thermal decomposition products** : These products are carbon oxides (CO, CO₂), nitrogen oxides (NO, NO₂ etc.), ammonia (NH₃).
- 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 that eyewash stations and safety showers are close to the workstation location
- 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.
- 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 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. 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%]
- Boiling point** : Decomposition temperature: 100°C (212°F)

9. Physical and chemical properties

Melting/freezing point	: <input checked="" type="checkbox"/> 11.5°C (11.3°F)
Vapour pressure	: 6.4 kPa (48 mm Hg) (at 40°C)
Density g/cm³	: <input checked="" type="checkbox"/> 1.09 g/cm ³ (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 ₂), nitrogen oxides (NO, NO ₂ etc.), ammonia (NH ₃).

11. Toxicological information

Potential acute health effects

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

Chronic effects	: <input checked="" type="checkbox"/> 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	: <input checked="" type="checkbox"/> No known significant effects or critical hazards.
Fertility effects	: <input checked="" type="checkbox"/> No known significant effects or critical hazards.

Over-exposure signs/symptoms

Inhalation	: <input checked="" type="checkbox"/> No specific data.
Ingestion	: <input checked="" type="checkbox"/> No specific data.
Skin	: <input checked="" type="checkbox"/> No specific data.
Eyes	: <input checked="" type="checkbox"/> No specific data.

12. Ecological information

Environmental effects : Readily biodegradable

Other ecological information

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

Product/ingredient name	<u>Aquatic half-life</u>	<u>Photolysis</u>	<u>Biodegradability</u>
<input checked="" type="checkbox"/> Air1®	-	-	Readily

Mobility : Soluble in the following materials: water

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.

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 :  **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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 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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