



SAFETY DATA SHEET

Urea Treated

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

1.1 Product identifier

Product name : Urea Treated
Product code : PA38AP
Product type : solid (Prills)

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

Notes : The safety data sheet and any attached exposure scenario are compiled in accordance with the REACH regulation and in no way reflects the specification, purity or quality standards required for specific applications and use of the product identified in section 1.1.

Identified uses

Industrial distribution.
Industrial USE to formulate chemical product mixtures.
Industrial USE as chemical intermediate.
Industrial Use for flue gas NO_x and SO_x reduction.
Industrial USE as reactive agent/processing aid and for general chemical applications (e.g. organic/inorganic synthesis, corrosion protection, latex production, extraction, plastics, water treatment/septicity control, pH/neutralising agent, ion exchange)
Industrial USE as chemical/process nutrient (e.g. pharmaceuticals, food, biofuel).
Industrial USE for surface/article treatment (e.g. metal, leather/textiles, plastics, wood, electronics/semiconductors, insulation, hardening, etchant).
Industrial USE to manufacture specialist chemical/other products (e.g. adhesives, biocides, catalysts, cleaning products, cosmetics, coatings/paints, construction chemicals, corrosion protection, insulation, inks, pharmaceuticals, polymer preparations)
Industrial USE as part of specialist chemicals/other products (e.g. adhesives, biocides, catalysts, cleaning products, corrosion protection, cosmetics, coatings/paints, deicing/antifreeze, insulation, inks, dyes, photochemical, polymer preparations)
Professional formulation of mixtures.
Professional USE as chemical/process nutrient (e.g. fertiliser, pharmaceuticals, food).
Professional USE as reactive agent/processing aid and for general chemical applications (e.g. corrosion protection products, pH/neutralising agent, processing of manure as fertiliser, water treatment).
Professional USE as a laboratory/research chemical.
Professional USE for surface/article treatment (e.g. metal, textiles/leather, plastics, wood, etching concrete).
Professional USE as part of specialist chemicals/other products (e.g. adhesives, biocides, cleaning products, corrosion protection, cosmetics, coatings/paints, deicing/antifreeze, inks/dyes, insulation, photochemical, polymer preparations)
Industrial USE to formulate fertilisers product mixtures.
Professional USE as such or in a mixture, as food/feed additive.
Industrial USE in manufacture of paper products.

Industrial USE as a laboratory/research chemical.
Professional distribution.

Uses advised against : None identified.

1.3 Details of the supplier of the safety data sheet

Yara Industrial B.V.

Address

Street : Zevenmanshaven
Number : 107
Postal code : 3133 CA
City : Vlaardingen
Country : Netherlands

P.O. Box Address

P.O. Box : 81
Postal code : 3130 AB
City : Vlaardingen
Country : Netherlands

Telephone number : +31 (0) 10 23 22 200
Fax no. : +31 (0) 10 23 22 250
e-mail address of person responsible for this SDS : industrial.benelux@yara.com

1.4 Emergency telephone number

National advisory body/Poison Center

Name : Nationaal Vergiftigings Informatie Centrum (alleen voor behandelend arts)
Telephone number : +31 (0) 30 274 88 88
Hours of operation : 24h

Supplier

Telephone number : +31 (0) 102 322 200
Hours of operation : (24h)

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 : Not classified.

Classification according to Directive 1999/45/EC [DPD]

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

Classification : Not classified.

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

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

2.2 Label elements

Signal word : No signal word.

Precautionary statements

Supplemental label elements : Not applicable.

Special packaging requirements

Containers to be fitted with child-resistant fastenings : Not applicable.

Tactile warning of danger : Not applicable.

2.3 Other hazards

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

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

Other hazards which do not result in classification : Product forms slippery surface when combined with water.

SECTION 3: Composition/information on ingredients

Substance/mixture : Mixture

There are no 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.

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

SECTION 4: First aid measures

4.1 Description of first aid measures

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

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

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.

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.

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

4.2 Most important symptoms and effects, both acute and delayed

Potential acute health effects

Eye contact : No known significant effects or critical hazards.

Inhalation : Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.

Skin contact : No known significant effects or critical hazards.

Ingestion : No known significant effects or critical hazards.

Over-exposure signs/symptoms

Eye contact : No specific data.

Inhalation : No specific data.

Skin contact : No specific data.

Ingestion : No specific data.

4.3 Indication of any immediate medical attention and special treatment needed

Notes to physician : In case of inhalation of decomposition products in a fire, symptoms 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 an extinguishing agent suitable for the surrounding fire.

Unsuitable extinguishing media : None identified.

5.2 Special hazards arising from the substance or mixture

Hazards from the substance or mixture : No specific fire or explosion hazard.

Hazardous thermal decomposition products : Decomposition products may include the following materials:
carbon dioxide
carbon monoxide
nitrogen 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 precautions for fire-fighters** : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
- 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.
- Additional information** : Not available.

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 suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment.
- For emergency responders** : If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

- 6.2 Environmental precautions** : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

6.3 Methods and materials for containment and cleaning up

- Small spill** : Move containers from spill area. Vacuum or sweep up material and place in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor. Material free from contamination can be used for its original purpose.
- Large spill** : Immediately contact emergency personnel. Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas. Vacuum or sweep up material and place in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor. Material free from contamination can be used for its original purpose.

- 6.4 Reference to other sections** : See Section 1 for emergency contact information.
See Section 8 for information on appropriate personal protective equipment.
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

- Protective measures** : Put on appropriate personal protective equipment (see Section 8). Product forms slippery surface when combined with water.
- 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

- Recommendations** : 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. 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.

7.3 Specific end use(s)

- Recommendations** : Not available.
- Industrial sector specific solutions** : Not available.

SECTION 8: Exposure controls/personal protection

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).

8.1 Control parameters

Occupational exposure limits

No exposure limit value known.

- Recommended monitoring procedures** : 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 European Standard EN 689 for methods for the assessment of exposure by inhalation to chemical agents and national guidance documents for methods for the determination of hazardous substances.

8.2 Exposure controls

Appropriate engineering controls : No special ventilation requirements. Good general ventilation should be sufficient to control worker exposure to airborne contaminants. If this product contains ingredients with exposure limits, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure below any recommended or statutory limits.

Individual protection measures

Hygiene measures : 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.

Eye/face protection : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts.

Skin protection

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.

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 measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

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.

Environmental exposure controls : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance

Physical state	:	solid (Prills)
Color	:	White.
Odor	:	Odorless.
Odor threshold	:	Not determined.
pH	:	7,2 [Conc.: 100 g/l]
Melting point/freezing point	:	134 °C
Initial boiling point and boiling range	:	Not determined.
Flash point	:	Not applicable
Evaporation rate	:	Not determined.
Flammability (solid, gas)	:	Non-flammable.
Burning time	:	Not determined.
Burning rate	:	Not determined.
Upper/lower flammability or explosive limits	:	Lower: Not determined. Upper: Not determined.
Vapor pressure	:	0,000016 hPa
Vapor density	:	Not determined.
Relative density	:	Not determined.
Density	:	1,33 g/cm ³
Solubility(ies)	:	Easily soluble in the following materials: cold water
Water solubility	:	> 100 g/l
Partition coefficient: n-octanol/water	:	Not determined.
Auto-ignition temperature	:	Not determined.
Viscosity	:	Dynamic: Not determined. Kinematic: Not determined.
Explosive properties	:	Non-explosive.
Oxidizing properties	:	None.

9.2 Other information

No additional information.

SECTION 10: Stability and reactivity

<u>10.1 Reactivity</u>	:	No specific test data related to reactivity available for this product or its ingredients.
<u>10.2 Chemical stability</u>	:	Stable under recommended storage and handling conditions (see section 7).
<u>10.3 Possibility of hazardous reactions</u>	:	Under normal conditions of storage and use, hazardous reactions will not occur.
<u>10.4 Conditions to avoid</u>	:	No specific data.

10.5 Incompatible materials : Urea reacts with calcium hypochlorite or sodium hypochlorite to form the explosive nitrogen trichloride.

Remark : acids
alkalis
nitrites and nitrates

10.6 Hazardous decomposition products : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Conclusion/Summary : Not toxic.

Irritation/Corrosion

Conclusion/Summary

Skin : Non-irritating.
Eyes : Non-irritating.
Respiratory : Non-irritating.

Sensitization

Conclusion/Summary

Skin : Not sensitizing
Respiratory : Not sensitizing

Mutagenicity

Conclusion/Summary : No mutagenic effect.

Carcinogenicity

Conclusion/Summary : No carcinogenic effect.

Teratogenicity

Conclusion/Summary : No teratogenic effect.

Reproductive toxicity

Conclusion/Summary : Not considered to be toxic to the reproductive system.

Information on the likely routes of exposure : No known significant effects or critical hazards.

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 physical, chemical and toxicological characteristics

- Inhalation** : No specific data.
- Ingestion** : No specific data.
- Skin contact** : No specific data.
- Eye contact** : No specific data.

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

- Potential immediate effects** : Adverse health effects are considered unlikely, when the product is used according to directions.
- Potential delayed effects** : None identified.

Long term exposure

- Potential immediate effects** : Adverse health effects are considered unlikely, when the product is used according to directions.
- Potential delayed effects** : None identified.

Potential chronic health effects

- Conclusion/Summary** : Not toxic.
- General** : 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.

Toxicokinetics

- Absorption** : Rapidly absorbed.
- Distribution** :
Not metabolized within liver tissues before entering the systemic circulation.
- Metabolism** : Metabolite is not known to be toxic.

Elimination : The chemical and its metabolites are fully excreted and do not accumulate within the body.

SECTION 12: Ecological information

12.1 Toxicity

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

12.2 Persistence and degradability

Conclusion/Summary : Readily biodegradable in plants and soils. The product does not show any bioaccumulation phenomena.

12.3 Bioaccumulative potential

12.4 Mobility in soil

Soil/water partition coefficient (KOC) : Not available.

Mobility : This product may move with surface or groundwater flows because its water solubility is: > 100 g/l

12.5 Results of PBT and vPvB assessment

PBT : P: No.
B: No.
T: No.

vPvB : vP: No.
vB: No.

12.6 Other adverse effects : 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).

13.1 Waste treatment methods

Product

Methods of disposal : The generation of waste should be avoided or minimized wherever possible. Significant quantities of waste product residues should not be disposed of via the foul sewer but processed in a suitable effluent treatment plant. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements.

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.

European waste catalogue (EWC)

Waste code	Waste designation
06 10 99	wastes not otherwise specified

Packaging**Methods of disposal**

- : The generation of waste should be avoided or minimized wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.

Special precautions

- : This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

SECTION 14: Transport information

	ADR/RID	ADN/ADNR	IMDG	IATA
14.1 UN number	Not regulated.	Not regulated.	Not regulated.	Not regulated.
14.2 UN proper shipping name				
14.3 Transport hazard class(es)				
14.4 Packing group				
14.5. Environmental hazards	No.	No.	No.	No.
14.6 Additional information	Hazard identification number / HI/Kemler number			
	Limited quantity			
	Special provisions			
	Tunnel code			
	Emergency schedules			
	Marine pollutant	No.	No.	No.
	Passenger and Cargo Aircraft			

Cargo Aircraft Only				Quantity limitation: Packaging instructions:
Remarks				

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable.

14.8 IMSBC

Proper shipping name : UREA
 Class : Not applicable.
 Group : C

SECTION 15: Regulatory information

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

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles : Not applicable.

Other EU regulations

Europe inventory : Not determined.
 Integrated pollution prevention and control list (IPPC) - Air : Not listed
 Integrated pollution prevention and control list (IPPC) - Water : Not listed
 Hazardous incident ordinance Remark : Not applicable.

National regulations

Germany - Storage code : 10 - 13
 Water Discharge Policy (ABM) : Slightly harmful to aquatic organisms., Abatement effort:, B

Notes : To our knowledge no other country or state specific regulations are applicable.

15.2 Chemical Safety Assessment : Complete.

SECTION 16: Other information

Abbreviations and acronyms : ATE = Acute Toxicity Estimate
 CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]
 DNEL = Derived No Effect Level
 EUH statement = CLP-specific Hazard statement
 PNEC = Predicted No Effect Concentration
 RRN = REACH Registration Number
 bw = Body weight

Key literature references and sources for data : EU REACH IUCLID5 CSR
 Regulation (EC) No 1272/2008 Annex VI
 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

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

Classification	Justification
Not classified. ,	

Full text of abbreviated R phrases : Not applicable.
Date of printing : 20.06.2012
Date of issue/ Date of revision : 07.12.2011
Date of previous issue : 00.00.0000
Version : 1.
Prepared by : Yara Product Classifications & Regulations.

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.