

# MSDS

Material Safety Data Sheets

## *Material Safety Data Sheet*

### *AdBlue*

#### **1. Chemical Product Identification**

**Product Name:** Adblue Urea

**SDS no.:** 0000003947

**Supplier:** Zista Group

#### **2. Composition/Information on Ingredients**

Water and Urea (31.8 - 33.2%)

**This product does not contain any hazardous ingredients at or above regulated thresholds.**

#### **3. Hazards Identification**

- **Statement of Hazardous/ Dangerous Nature:** NON-HAZARDOUS SUBSTANCE. NON-DANGEROUS GOOD.

#### **4. First Aid Measures**

- **Eye Contact:** In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Eyelids should be held away from the eyeball to ensure thorough rinsing. Check for and remove any contact lenses. Get medical attention if irritation occurs.
- **Skin contact:** Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Wash clothing before reuse. Clean shoes thoroughly before reuse. Get medical attention if irritation develops.
- **Inhalation:** If inhaled, remove to fresh air. Get medical attention if symptoms appear. 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
- **Ingestion:** Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.

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- **Advice to doctor:** Treatment should in general be symptomatic and directed to relieving any effects.

### 5. Fire-fighting Measures

- **Extinguishing Media Suitable:** In case of fire, use foam, dry chemical or carbon dioxide extinguisher or spray.
- **Not Suitable:** Do not use water jet.
- **Hazardous Decomposition Products:** Combustion products may include the following: carbon oxides (CO, CO<sub>2</sub>) (carbon monoxide, carbon dioxide) nitrogen oxides.
- **Unusual Fire/Explosion Hazards:** In a fire or if heated, a pressure increase will occur and the container may burst.
- **Special Fire-Fighting Procedures:** No action shall be taken involving any personal risk or without suitable training. Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire.
- **Protection of Fire-Fighting:** 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:** 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 spilt material. Put on appropriate personal protective equipment (see Section 8).
- **Environmental Precaution:** Avoid dispersal of spilt 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).
- **Large Spill:** Stop leak if without risk. Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-

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combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations. Dispose of via a licensed waste disposal contractor.

- **Small Spill:** Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

### **7. Handling and Storage**

- **Storage:** Store and use only in equipment/containers designed for use with this product. Keep away from heat and direct sunlight. 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. Store in accordance with local regulations. Store in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10).
- **Handling:** Put on appropriate personal protective equipment.
- **Not suitable:** Prolonged exposure to elevated temperature.

### **8. Exposure Controls/Personal Protection**

- **Occupational exposure limits:** No exposure standard allocated.
- **Biological Limit Value:** No biological limit allocated.
- **Exposure controls:**
  - ✓ **Occupational exposure controls:** Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective occupational exposure limits. All activities involving chemicals should be assessed for their risks to health, to ensure exposures are adequately controlled. Personal protective equipment should only be considered after other forms of control measures (e.g. engineering controls) have been suitably evaluated. Personal protective equipment should conform to appropriate standards, be suitable for use, be kept in good condition and properly maintained. Your supplier of personal protective equipment should

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be consulted for advice on selection and appropriate standards. For further information contact your national organization for standards. The final choice of protective equipment will depend upon a risk assessment. It is important to ensure that all items of personal protective equipment are compatible.

- ✓ **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. Ensure that eyewash stations and safety showers are close to the workstation location
- **Personal protective equipment:**
  - ✓ **Respiratory protection:** Respiratory protective equipment is not normally required where there is adequate natural or local exhaust ventilation to control exposure. In case of insufficient ventilation, wear suitable respiratory equipment. The correct choice of respiratory protection depends upon the chemicals being handled, the conditions of work and use, and the condition of the respiratory equipment. Safety procedures should be developed for each intended application. Respiratory protection equipment should therefore be chosen in consultation with the supplier/manufacturer and with a full assessment of the working conditions.
  - ✓ **Skin and body:** Use of protective clothing is good industrial practice. Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. Cotton or polyester/cotton overalls will only provide protection against light superficial contamination that will not soak through to the skin. Overalls should be laundered on a regular basis. When the risk of skin exposure is high (e.g. when cleaning up spillages or if there is a risk of splashing) then chemical resistant aprons and/or impervious chemical suits and boots will be required.
  - ✓ **Hand protection:** Wear protective gloves if prolonged or repeated contact is likely. The correct choice of protective gloves depends upon the chemicals being handled, the conditions of work and use, and the condition of the gloves (even the best chemically resistant glove will break down after repeated chemical exposures). Most gloves provide only a short time of

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protection before they must be discarded and replaced. Because specific work environments and material handling practices vary, safety procedures should be developed for each intended application. Gloves should therefore be chosen in consultation with the supplier/manufacturer and with a full assessment of the working conditions.

- ✓ **Eye protection:** Safety glasses with side shields.

### 9. Physical and Chemical Properties

<b>Physical state</b>	<i>Liquid.</i>
<b>Color</b>	<i>Clear. Colorless.</i>
<b>Odor</b>	<i>Ammonia Cal. [Slight]</i>
<b>Vapor pressure</b>	<i>Not available.</i>
<b>Vapor density</b>	<i>Not available.</i>
<b>pH</b>	<i>9.5</i>
<b>Boiling point / range</b>	<i>Not available.</i>
<b>Melting point / range</b>	<i>Not available.</i>
<b>Relative density/Specific</b>	<i>Not available.</i>
<b>Density</b>	<i>1094 kg/m<sup>3</sup> (1.094 g/cm<sup>3</sup>) at 20°C</i>
<b>Solubility</b>	<i>Soluble in water.</i>
<b>Partition coefficient</b>	<i>&lt;1</i>

### 10. Stability and Reactivity

- **Stability:** The product is stable.
- **Conditions to avoid:** Avoid contamination by any source including metals, dust and organic materials.
- **Incompatibility with various substances/Hazardous Reactions:** No hazardous reactions identified.
- **Hazardous decomposition products:** Combustion products may include the following: carbon oxides (CO, CO<sub>2</sub>) (carbon monoxide, carbon dioxide) nitrogen oxides

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### **11. Toxicological Information**

- **Eye:** No significant health hazards identified.
- **Skin:** No significant health hazards identified.
- **Inhalation:** No significant health hazards identified.
- **Ingestion:** Ingestion of large quantities may cause nausea and diarrhea
- **Acute toxicity:** Unlikely to cause more than transient stinging or redness if accidental eye contact occurs. Unlikely to cause harm to the skin on brief or occasional contact but prolonged or repeated exposure may lead to dermatitis. Unlikely to cause harm if accidentally swallowed in small doses, though larger quantities may cause nausea and diarrhea. At normal ambient temperatures this product will be unlikely to present an inhalation hazard because of its low volatility. May be harmful by inhalation if exposure to vapor, mists or fumes resulting from thermal decomposition products occurs.
- **Chronic toxicity:**
  - ✓ *Other chronic toxicity data:* Overexposure to the inhalation of airborne droplets or aerosols may cause irritation of the respiratory tract.
  - ✓ *Mutagenic effects:* No known significant effects or critical hazards.

### **12. Ecological Information**

- **Ecotoxicity:** Not classified as environmentally hazardous in accordance with the 'Approved Criteria for Classifying Hazardous Substances' [NOHSC (1008)/2004 as amended and adapted]

### **13. Disposal Considerations**

- **Disposal considerations / Waste information:** The generation of waste should be avoided or minimised wherever possible. 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. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when

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recycling is not feasible. 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 spilt material and runoff and contact with soil, waterways, drains and sewers.

- **Special Precautions for Landfill or Incineration:** No additional special precautions identified.

### 14. Transport Information

- **International transport regulations:** Not classified as dangerous for transport (ADG, IMDG, ICAO/IATA).
- **Special precautions for use:** No known special precautions required. See Section: "Handling and storage" for additional information.

### 15. Regulatory Information

- **Standard Uniform Schedule of Medicine and Poisons:** Not regulated
- **Other regulations:**
  - ✓ **REACH Status:** For the REACH status of this product please consult your company contact, as identified in Section 1.
  - ✓ **United States inventory:** All components are listed or exempted.
  - ✓ **Canada inventory:** All components are listed or exempted.
  - ✓ **China inventory (IECSC):** All components are listed or exempted.
  - ✓ **Japan inventory (ENCS):** All components are listed or exempted.
  - ✓ **Korea inventory (KECI):** All components are listed or exempted.
  - ✓ **Philippines inventory(PICCS):** All components are listed or exempted.

### 16. Disclaimer of Expressed and Implied Warranties

- **Key to abbreviations:**
  - ✓ AMP = Acceptable Maximum Peak
  - ✓ ACGIH = American Conference of Governmental Industrial Hygienists, an agency that promulgates exposure standards.
  - ✓ ADG = Australian Code for the Transport of Dangerous Goods by Road and Rail

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- ✓ *ADG Code = Australian Code for the Transport of Dangerous Goods by Road and Rail*
- ✓ *CAS Number = Chemical Abstracts Service Registry Number*
- ✓ *HAZCHEM Code = Emergency action code of numbers and letters which gives information to emergency services. Its use is required by the ADG Code for Dangerous Goods in bulk.*
- ✓ *ICAO = International Civil Aviation Organization.*
- ✓ *IATA = International Air Transport Association, the organization promulgating rules governing shipment of goods by air.*
- ✓ *IMDG = International Maritime Organization Rules, rules governing shipment of goods by water.*
- ✓ *IP 346 = A chemical screening assay for dermal toxicity. The European Commission has recommended that Method IP 346 be used as the basis for labelling certain lubricant oil base stocks for carcinogenicity. The EU Commission has stipulated that the classification as a carcinogen need not apply if it can be shown that the substance contains less than 3% DMSO extract as measured by IP 346. (See Note L, European Commission Directive 67/548/EEC as amended and adapted.) DMSO is a solvent.*
- ✓ *NOHSC = National Occupational Health & Safety Commission, Australia*
- ✓ *TWA = Time weighted average*
- ✓ *STEL = Short term exposure limit*
- ✓ *UN Number = United Nations Number, a four digit number assigned by the United Nations Committee of Experts on the Transport of Dangerous Goods.*