



Material Safety Data Sheet

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY/ UNDERTAKING

Material Name	BlueChem®/AUS32/DEF/ISO22241 /AdBlue®
Recommended Uses	Additive to be used for injection into diesel exhaust systems
Product Code	DIN 70070
Manufacturer/Supplier	BlueChem Industries LLC Shed No. 4, Plot No. 4303, Street No. 3, Industrial Area No. 10, Sharjah, UAE.
Telephone	+9716 5642127
Fax	+9716 5641169
Emergency Call	0562057275 within UAE only

2. HAZARDS IDENTIFICATION

NON-HAZARDOUS SUBSTANCE. NON-DANGEROUS GOODS.

Symbol(s)	No Hazard Symbol required.
Health Hazards	Not expected to be a health hazard when used under normal conditions. May pose an inhalation hazard in confined areas due to its ability to produce ammonia vapors.
Signs and Symptoms	Not expected to give rise to an acute hazard under normal conditions of use.
Environmental Hazards	Not classified as dangerous for the environment.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Description	Concentrated aqueous solution containing urea.				
Hazardous Components					
Chemical Identity	CAS	EINECS	Symbol(s)	R-phrase(s)	Conc.
Water	7732-18-5	231-791-2	-	-	0.00 - 67.50 %
Urea	57-13-6	200-315-5			0.00 - 32.50 %

4. FIRST AID MEASURES

General Information	Not expected to be a health hazard when used under normal conditions.
Inhalation	No treatment necessary under normal conditions of use. If symptoms persist, obtain medical advice.
Skin Contact	Remove contaminated clothing. Flush exposed area with water and follow by washing with soap if available. If persistent irritation occurs, obtain medical attention.
Eye Contact	Flush eye with copious quantities of water. If persistent irritation occurs, obtain medical attention.
Ingestion	In general no treatment is necessary unless large quantities are swallowed, however, get medical advice.
Advice to Physician	Treat symptomatically



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5. FIRE FIGHTING MEASURES	
Clear fire area of all non-emergency personnel.	
Specific Hazards	When heated, releases ammonia and when heated to decomposition it emits toxic fumes of nitrogen oxides, ammonia and cyanuric acid.
Suitable Extinguishing Media	Foam, water spray or fog. Dry chemical powder, carbon-dioxide, sand or earth may be used for small fires only.
Unsuitable Extinguishing Media	Do not use water in a jet.
Protective Equipment for Firefighters	Proper protective equipment including breathing apparatus must be worn when approaching a fire in a confined space.
6. ACCIDENTAL RELEASE MEASURES	
Avoid contact with spilled or released material. For guidance on selection of personal protective equipment see Chapter 8 of this Material Safety Data Sheet. See Chapter 13 for information on disposal. Observe the relevant local and international regulations.	
Protective measures	Avoid contact with skin and eyes. Use appropriate containment to avoid environmental contamination. Prevent from spreading or entering drains, ditches or rivers by using sand, earth, or other appropriate barriers.
Clean Up Methods	Prevent from spreading by making a barrier with sand, earth or other containment material. Reclaim liquid directly or in an absorbent. Soak up residue with an absorbent such as clay, sand or other suitable material and dispose of properly.
7. HANDLING AND STORAGE	
General Precautions	Use local exhaust ventilation if there is risk of inhalation of vapors, mists or aerosols. Properly dispose of any contaminated rags or cleaning materials in order to prevent fires. Use the information in this data sheet as input to a risk assessment of local circumstances to help determine appropriate controls for safe handling, storage and disposal of this material. Vehicle fueling and vehicle workshop areas - Avoid inhalation of vapors and contact with skin, when filling or emptying a vehicle.
Handling	Avoid prolonged or repeated contact with skin. Avoid inhaling vapor and/or mists. When handling product in drums, safety footwear should be worn and proper handling equipment should be used.
Storage	Keep container tightly closed and in a cool, well-ventilated place. Use properly labeled and closeable containers.
Recommended Materials	For containers or container linings, use stainless steel or high density polyethylene.
8. EXPOSURE CONTROLS/PERSONAL PROTECTION	
Exposure Controls	The level of protection and types of controls necessary will vary depending upon potential exposure conditions. Select controls based on a risk assessment of local circumstances. Appropriate measures include: Adequate ventilation to control airborne concentrations. Where material is heated, sprayed or mist formed, there is greater potential for airborne concentrations to be generated.
Personal Protective Equipment	Personal protective equipment (PPE) should meet recommended national standards. Check with PPE suppliers.
Respiratory Protection	No respiratory protection is ordinarily required under normal conditions of use. In accordance with good industrial hygiene practices, precautions should be taken to avoid breathing of material. If engineering controls do not maintain airborne concentrations to a level which is adequate to protect worker health, select respiratory protection equipment suitable for the specific conditions of use and meeting relevant legislation. Check with



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Hand Protection	respiratory protective equipment suppliers. Where air-filtering respirators are suitable, select an appropriate combination of mask and filter. Select gloves tested to a relevant standard (e.g. Europe EN374, US F739). Suitability and durability of a glove is dependent on usage, e.g. frequency and duration of contact, chemical resistance of glove material, glove thickness and dexterity. Always seek advice from glove suppliers. Contaminated gloves should be replaced. Personal hygiene is a key element of effective hand care. Gloves must only be worn on clean hands. After using gloves, hands should be washed and dried thoroughly. Application of a non-perfumed moisturizer is recommended.
Eye Protection	Wear safety glasses or full face shield if splashes are likely to occur.
Protective Clothing	Skin protection not ordinarily required beyond standard issue work clothes.
Environmental Exposure Controls	Minimize release to the environment. An environmental assessment must be made to ensure compliance with local environmental legislation.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Colorless. Liquid.
Odor	Almost odorless.
pH	8 - 10
Boiling Point	103°C
Vapor pressure	Approx 48 mm Hg (at 40°C)
Density	1.090 g/cm ³ at 20° C
Water solubility	Soluble.

10. STABILITY AND REACTIVITY

Stability	Stable. Decomposes above 135°C.
Conditions to Avoid	Extremes of temperature and direct sunlight.
Materials to Avoid	Strong oxidizing agents.
Hazardous Decomposition Products	Hazardous decomposition products are not expected to form during normal storage. At high temperatures, will decompose to ammonia and carbon dioxide. If burnt, will emit nitrogen oxides, ammonia and cyan uric acid.

11. TOXICOLOGICAL INFORMATION

Acute Oral Toxicity	Expected to be of low toxicity:LD50 > 5000 mg/kg, Rat
Acute Dermal Toxicity	Expected to be of low toxicity:LD50 > 5000 mg/kg, Rabbit
Acute Inhalation Toxicity	Not considered to be an inhalation hazard under normal conditions of use.
Skin Irritation	Not expected to be a hazard.
Eye Irritation	Not expected to be a hazard.
Respiratory Irritation	Inhalation of vapors or mists may cause irritation.
Sensitization	Not expected to be a skin sensitizer.



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Repeated Dose Toxicity	Not expected to be a hazard.
Mutagenicity	Not considered a mutagenic hazard.
Carcinogenicity	Components are not known to be associated with carcinogenic effects.
Reproductive and Developmental Toxicity	Not expected to be a hazard.
12. ECOLOGICAL INFORMATION	
Eco-toxicological data have not been determined specifically for this product. Information given is based on knowledge of the components and the eco-toxicology of similar products.	
Acute Toxicity	Expected to be practically non toxic: LL/EL/IL50 > 100 mg/l (LL/EL50 expressed as the nominal amount of product required to prepare aqueous test extract).
Mobility	Large volumes may penetrate soil and could contaminate ground water.
Persistence/degradability	Readily biodegradable.
Bioaccumulation	Not expected to bio-accumulate significantly.
Other Adverse Effects	Not expected to have ozone depletion potential, photochemical ozone creation potential or global warming potential. Will exert oxygen demand when significant quantities enter watercourses and may cause damage to aquatic life.
13. DISPOSAL CONSIDERATIONS	
Material Disposal	Recover or recycle if possible. It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste classification and disposal methods in compliance with applicable regulations. Do not dispose into the environment, in drains or in water courses.
Container Disposal	Dispose in accordance with prevailing regulations, preferably to a recognized collector or contractor. The competence of the collector or contractor should be established beforehand.
Local Legislation	Disposal should be in accordance with applicable regional, national, and local laws and regulations.
14. TRANSPORT INFORMATION	
RID, ADR, ADNR and IMDG	This material is not classified as dangerous according to the Dangerous Goods Code. This material is not classified as dangerous under IMDG regulations.
IATA (Country variations may apply)	This material is either not classified as dangerous under IATA regulations or needs to follow country specific requirements.
15. REGULATORY INFORMATION	
The regulatory information is not intended to be comprehensive. Other regulations may apply to this material. Not classed as hazardous material according to EC Directive 67/548/EC and therefore no obligation for registration.	
16. OTHER INFORMATION	
MSDS Distribution	The information in this document should be made available to all who may handle the product.
Disclaimer	This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.