Safety Data Sheet

according to the United Nations GHS (Rev. 9, 2021) Issue date: 25/11/2024 Revision date: 25/11/2024 Version: 1.0

SECTION 1: Identification

1.1. GHS Product identifier

Product form : Mixture
Trade name : AUS 32

Other Names : AUS32 (UAN/ADBLUE)

1.2. Other means of identification

No additional information available

1.3. Recommended use of the chemical and restrictions on use

Recommended use : Used in a selective catalytic reduction (SCR) process to reduce emissions of oxides of

nitrogen from the exhaust of diesel engined motor vehicles.

Restrictions on use : No information available

1.4. Supplier's details

Supplier

Bluetech Environmental Technology Sdn. Bhd 202401040146 (1585993-A)
No.351, Jalan Haruan 7, Oakland Industrial Park, 70300 Seremban, Negeri Sembilan. Malaysia. T+6018 255 1682 F+606763 2092 bluetechenvironmental@gmail.com

1.5. Emergency phone number

Emergency number : Malaysia +6018 255 1682

SECTION 2: Hazard identification

2.1. Classification of the substance or mixture

Classification according to the United Nations GHS

Not classified

2.2. GHS Label elements, including precautionary statements

Labelling according to the United Nations GHS

Hazard pictograms (GHS UN) : None
Signal word (GHS UN) : None
Hazard statements (GHS UN) : Not applicable
Precautionary statements (GHS UN) : Not applicable

2.3. Other hazards which do not result in classification

Other hazards not contributing to the classification : No information available

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable.

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3.2. Mixtures

Name	Product identifier	%	
Water	CAS-No.: 7732-18-5	67.5	
Urea	CAS-No.: 57-13-6	32.5	

Full text of H-statements: see section 16

SECTION 4: First-aid measures

4.1. Description of necessary first-aid measures

First-aid measures general : IF exposed or concerned: Get medical advice/attention.

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. Give oxygen or artificial

respiration if necessary. Get medical advice/attention if you feel unwell.

First-aid measures after skin contact Take off immediately all contaminated clothing and wash it before reuse. Wash skin with

plenty of water. If skin irritation or rash occurs: Get medical advice/attention.

First-aid measures after eye contact : If contact with the eye(s) occurs, flush the eye with copious amounts of water for at least 15 minutes holding eyelid(s) open. Take care not to rinse contaminated water into the non-

affected eye. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

First-aid measures after ingestion : Do not induce vomiting. Never give anything by mouth to an unconscious person. Rinse

mouth. Call a poison center or a doctor if you feel unwell.

4.2. Most important symptoms/effects, acute and delayed

Symptoms/effects : No additional information available

4.3. Indication of immediate medical attention and special treatment needed, if necessary

No additional information available

SECTION 5: Fire-fighting measures

5.1. Suitable extinguishing media

Suitable extinguishing media : Use extinguishing media appropriate for surrounding fire.

Unsuitable extinguishing media : No information available.

5.2. Specific hazards arising from the chemical

Fire hazard : The product is not flammable.

Hazardous decomposition products in case of fire : Toxic fumes may be released. Carbon oxides (CO), toxic nitrogen oxides (NOx) and

Ammonia.

5.3. Special protective actions for fire-fighters

Firefighting instructions Appropriate self-contained breathing apparatus may be required.

Complete protective clothing. Do not allow run-off from fire fighting to enter drains or water courses. Cool down the containers exposed to heat with a water spray. Evacuate personnel to a safe area. Eliminate all ignition sources if safe to do so. Move containers from fire area

if it can be done without personal risk. Wear suitable protective clothing.

Protection during firefighting Do not attempt to take action without suitable protective equipment. Self-contained

breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures : Ventilate spillage area. Access forbidden to unauthorised personnel. Always wash hands

after handling the product. Avoid contact with skin and eyes. Avoid breathing

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dust/fume/gas/mist/vapours/spray. Access forbidden to unauthorised personnel. Evacuate personnel to a safe area. Only qualified personnel equipped with suitable protective equipment may intervene.

6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information

refer to section 8: "Exposure controls/personal protection".

6.2. Environmental precautions

Avoid release to the environment. Prevent entry of product in public water, sewers or soil. Notify authorities if product enters sewers or public waters

6.3. Methods and materials for containment and cleaning up

For containment : Collect spillage.

Methods for cleaning up : Take up liquid spill into absorbent material. Absorb with liquid-binding material (e.g. sand,

diatomaceous earth, acid- or universal binding agents). For large spills, confine the spill in a dike and charge it with wet sand or earth for subsequent safe disposal. Collect all waste in

suitable and labelled containers and dispose according to local legislation.

Other information : Dispose of materials or solid residues at an authorized site.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Ensure good ventilation of the work station. Handle in accordance with good industrial

hygiene and safety practice. Keep container closed when not in use. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Take all necessary technical measures to avoid or minimize the release of the product on the workplace. Wear personal protective equipment. Floors, walls and other

surfaces in the hazard area must be cleaned regularly. Do not breathe

dust/fume/gas/mist/vapours/spray. Avoid contact with skin and eyes. Keep away from heat,

hot surfaces, sparks, open flames and other ignition sources. No smoking.

Hygiene measures : Separate working clothes from town clothes. Launder separately. Contaminated work

clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands after

handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Containers which are opened should be properly resealed and kept upright to prevent

leakage.

Storage conditions : Keep only in the original, safely locked container in a cool and well ventilated place. Store

away from all heat sources, including direct sunlight. Keep away from Oxidizing agents,

Acids, Bases, Alkalis, Nitrates, Hypochlorites. Storage temperature: < 25 °C.

Material used in packaging/containers

: Recommended: Stainless steel, Synthetic material, Polyethylene, Glass.

Not suitable: Carbon steel, Copper, Bronze.

Incompatible materials : Oxidizing agents, Acids, Bases, Alkalis, Nitrates, Hypochlorites.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No additional information available

8.2. Appropriate engineering controls

Appropriate engineering controls : Ensure good ventilation of the work station.

Environmental exposure controls : Avoid release to the environment.

8.3. Individual protection measures, such as personal protective equipment (PPE)

Hand protection : Impermeable protective glovess (Butyl rubber, Natural rubber, Nitrile rubber, ...).

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Eye protection : Safety glasses with side shields. Splash proof goggles. A full-face shield.

Skin and body protection : Wear suitable protective clothing.

Respiratory protection : [In case of inadequate ventilation] wear respiratory protection.

8.4. Exposure limit values for the other components

No additional information available

SECTION 9: Physical and chemical properties

9.1. Basic physical and chemical properties

Physical state : Liquid

Appearance : Clear, colorless liquid

Colour : Colourless. Odour Odour of ammonia. Odour threshold : Not available Melting point : -11.5 °C Freezing point : Not available : Not available Boiling point : Not available Flammability : Not available Lower explosion limit Upper explosion limit : Not available

Flash point : Not available
Auto-ignition temperature : Not available
Decomposition temperature : 100 °C

pH : 9.8 – 10 (10% solution)

pH solution : Not available
Viscosity, kinematic (calculated value) (40 °C) : Not available
Partition coefficient n-octanol/water (Log Pow) : -1.59 @ 20°C
Partition coefficient n-octanol/water (Log Kow) : Not available
Vapour pressure : 6.4 kPa (40°C)
Vapour pressure at 50 °C : Not available

Density : Approx.1.09 kg/l @ 20 °C

Relative density : Not available Relative vapour density at 20 °C : Not available

Solubility : Completely soluble in Water. Soluble in Ethanol, Acetic acid, Hydrogen chloride.

Viscosity, dynamic : Not available
Particle size : Not applicable.

9.2. Data relevant with regard to physical hazard classes (supplemental)

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

High temperatures..

10.5. Incompatible materials

Oxidizing agents, Acids, Bases, Alkalis, Nitrates, Hypochlorites.

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10.6. Hazardous decomposition products

On combustion or on thermal decomposition (pyrolysis) releases carbon oxides (CO), toxic nitrogen oxides (NOx) and ammonia...

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral) : Not classified
Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : Not classified

Urea (57-13-6)

LD50 oral rat 8471 mg/kg

Water (7732-18-5)

LD50 oral rat > 90 ml/kg

Skin corrosion/irritation : Not classified

pH: 9.8 - 10 10% solution

Serious eye damage/irritation : Not classified

pH: 9.8 - 10 10% solution

Respiratory or skin sensitisation : Not classified
Germ cell mutagenicity : Not classified
Carcinogenicity : Not classified
Reproductive toxicity : Not classified
STOT-single exposure : Not classified
STOT-repeated exposure : Not classified
Aspiration hazard : Not classified

SECTION 12: Ecological information

12.1. Toxicity

Hazardous to the aquatic environment, short-term : Not classified

acute)

Hazardous to the aquatic environment, long-term : Not classified

(chronic)

Urea (57-13-6)	
LC50 - Fish [1]	16200 – 18300 mg/l (Exposure time: 96 h - Species: Poecilia reticulata)
EC50 - Crustacea [1]	3910 mg/l (Exposure time: 48 h - Species: Daphnia magna [Static])

12.2. Persistence and degradability

AUS 32		
Persistence and degradability	No additional information available	

12.3. Bioaccumulative potential

AUS 32	
Partition coefficient n-octanol/water (Log Kow)	-1.59 @ 20°C
Bioaccumulative potential	No additional information available
Urea (57-13-6)	
BCF - Fish [1]	(10 dimensionless)
Partition coefficient n-octanol/water (Log Kow)	<-1.73 (at 22 °C)

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Water (7732-18-5)	
Partition coefficient n-octanol/water (Log Kow)	-1.38

12.4. Mobility in soil

AUS 32	
Mobility in soil	No additional information available

12.5. Other adverse effects

Ozone : Not classified

Other adverse effects : No additional information available

SECTION 13: Disposal considerations

SECTION 13: Disposal considerations

13.1. Disposal methods

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.

Do not pour into drains or waterways. Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international

regulation.

Contaminated packaging

: Dispose of contents/container in accordance with licensed collector's sorting instructions. Empty containers should be taken for recycling, recovery or waste in accordance with local regulation. Dispose of contents/container to hazardous or special waste collection point, in

accordance with local, regional, national and/or international regulation.

SECTION 14: Transport information

In accordance with UN RTDG / IMDG / IATA

IMDG	IATA
Not applicable.	Not applicable.
Not applicable.	Not applicable.
Not applicable.	Not applicable.
Not applicable.	Not applicable.
Dangerous for the environment: No Marine pollutant: No	Dangerous for the environment : No
	Not applicable. Not applicable. Not applicable. Not applicable. Dangerous for the environment: No

14.6. Special precautions for user

UN RTDG

No data available

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IMDG

No data available

IATA

No data available

14.7. Transport in bulk according to IMO instruments

Not applicable

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations specific for the product in question

Commercial status of components according to the United States Environmental Protection Agency's Toxic Substances Control Act (TSCA):

Name	CAS-No.	Listing	Commercial status	Flags	
Urea	57-13-6	Present	Active		
Water	7732-18-5	Present	Active		

Urea (57-13-6)

Listed on the Canadian DSL (Domestic Substances List)

Water (7732-18-5)

Listed on the Canadian DSL (Domestic Substances List)

Urea (57-13-6)

Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

Water (7732-18-5)

Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

Urea (57-13-6)

Listed introduction on Australian Industrial Chemicals Introduction Scheme (AICIS Inventory)

Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)

Listed on the Japanese ENCS (Existing New Chemical Substances) inventory

Listed on KECL/KECI (Korean Existing Chemicals Inventory)

Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)

Listed on NZIoC (New Zealand Inventory of Chemicals)

Listed on the Japanese ISHL (Industrial Safety and Health Law)

Listed on INSQ (Mexican National Inventory of Chemical Substances)

Listed on the TCSI (Taiwan Chemical Substance Inventory)

Listed on the Vietnam NCI (National Chemicals Inventory)

Water (7732-18-5)

Listed introduction on Australian Industrial Chemicals Introduction Scheme (AICIS Inventory)

Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)

Listed on the Japanese ENCS (Existing New Chemical Substances) inventory

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Water (7732-18-5)

Listed on the Vietnam NCI (National Chemicals Inventory)

SECTION 16: Other information

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 : 1.0

 Issue date
 : 25/11/2024

 Revision date
 : 25/11/2024

Indication of changes:

No information available.

Abbreviations and acronyms : ADN - European Agreement concerning the International Carriage of Dangerous Goods by

Inland Waterways

ADR - Agreement concerning the International Carriage of Dangerous Goods by Road

EC50 - Median effective concentration LC50 - Median lethal concentration

LD50 - Median lethal dose

RID - Regulations concerning the International Carriage of Dangerous Goods by Rail

SDS - Safety Data Sheet

IARC - International Agency for Research on Cancer IATA - International Air Transport Association

Training advice : Normal use of this product shall imply use in accordance with the instructions on the

packaging

Other information : No information available.

Safety Data Sheet (SDS), UN

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.