MATERIAL SAFETY DATA SHEET

Material Name: AZSTOL Diesel Exhaust Fluid (DEF / AdBlue)	**Document Number: WS/MSDS/GFPPI/2572**
Effective Date: 22/07/2026	**Total Pages: 11**

1. Identification of substance / Preparation and the company:

Product Name:	AZSTOL Diesel Exhaust Fluid (DEF / AdBlue)
Product Type:	Diesel Exhaust Fluid (DEF) / Aqueous Urea Solution (AUS 32) for SCR Systems
Technical Description:	Clear, colourless aqueous solution containing 32.5% high purity urea and 67.5% deionized water, formulated in accordance with ISO 22241. The product is specifically designed for use in Selective Catalytic Reduction (SCR) systems of diesel engines to reduce nitrogen oxide (NOx) emissions and improve exhaust gas treatment performance.
Recommended Use:	Used as Diesel Exhaust Fluid (DEF / AdBlue) in Selective Catalytic Reduction (SCR) systems installed in diesel-powered vehicles and equipment to reduce NOx emissions. Intended for professional, commercial and automotive applications only.
Company Name:	**GULF FIRST PETRO PRODUCTS INDIA PRIVATE LIMITED** **Registered Address:** No. 10/460A (Old No. 10/466C), Velur Road, Velakkode, Mundur P.O., Thrissur – 680541, Kerala, India **Contact Number:** +91 9847496699 **Email:** info.gulffirst@gmail.com / steephenvd@gmail.com
Emergency Contact Information:	**India:** In case of accidental exposure or emergency, seek immediate medical advice. Contact the nearest Poison Centre or medical facility if required.

2. Hazard Identification:

Emergency Overview: Clear, colourless aqueous solution with a slight ammonia-like odour. The product is not classified as hazardous according to the Globally Harmonized System (GHS). Direct contact with the eyes may cause mild irritation. Good industrial hygiene practices should be followed during handling.

GHS Classification: Not classified as hazardous according to GHS for the finished product.

Signal Word: Not applicable.

Hazard Pictogram: No pictogram required.

Hazard Statements: No hazard statements applicable.

Precautionary Statements: Avoid contact with eyes. Wash hands after handling. Store in clean, tightly closed containers. Do not contaminate with fuels, oils or chemicals.

Other hazards: Product is not considered hazardous. Spilled liquid may create slippery surfaces.

Chemical Composition:	CAS No:	Approximate % (w/w)
High Purity Urea	57-13-6	32.5%
Deionized Water	7732-18-5	67.5%
Additional Information: The product is an aqueous urea solution prepared using high purity urea and deionized water in accordance with ISO 22241 requirements. It does not contain hazardous impurities at concentrations requiring disclosure under applicable GHS regulations.		

4. First Aid:

General:	If irritation or discomfort occurs following exposure, obtain medical attention. Show this Safety Data Sheet to the attending physician if necessary.
First aid after Inhalation:	Move the affected person to fresh air. If respiratory irritation persists after exposure to mist or vapour, seek medical attention.
First aid after Ingestion:	Rinse mouth thoroughly with water. Drink plenty of water if conscious. Do not induce vomiting. Seek medical advice if a large quantity has been swallowed or if discomfort persists.
First aid Skin contact:	Remove contaminated clothing and wash the affected area thoroughly with soap and water. Seek medical advice if irritation develops or persists.
First aid Eye contact:	Immediately rinse cautiously with clean water for at least 15 minutes while holding the eyelids open. Remove contact lenses if present and easy to do. Seek medical attention if irritation continues.

5. Fire Fighting Measures:

Suitable extinguishing media:	Use water spray, dry chemical powder, carbon dioxide (CO_2), foam or other extinguishing media suitable for the surrounding fire.
Unsuitable extinguishing media:	No specific unsuitable extinguishing media are known. Select extinguishing agents appropriate for the surrounding fire conditions.
Protective equipment:	Firefighters should wear self-contained breathing apparatus (SCBA) and appropriate protective clothing. Cool exposed containers with water spray and prevent contaminated firefighting water from entering drains or natural watercourses.
Special Hazards:	The product itself is non-combustible and does not support combustion. When exposed to excessive heat or fire, thermal decomposition may produce ammonia, nitrogen oxides (NOx) and carbon dioxide, which may be irritating to the respiratory system.

6. Accidental Release Measure:

Personal Precautions:	Avoid unnecessary contact with the spilled product. Wear suitable protective gloves and safety glasses during clean-up. Spilled liquid may create slippery surfaces; exercise caution to prevent slips and falls. Ensure adequate ventilation when handling large spills.
Environmental Precautions:	Prevent large quantities of the product from entering drains, sewers, surface water or soil. Contain the spill wherever possible and dispose of waste in accordance with local environmental regulations.

Methods and materials for containment and clean up:	Absorb the spilled liquid using sand, earth or other inert absorbent material. Collect the absorbed material into suitable containers for disposal. Wash the contaminated area thoroughly with water after removal of the spill, taking care to avoid slippery conditions.
Reference to other sections:	Refer to Section 8 for personal protective equipment and Section 13 for disposal considerations.

7. Handling and Storage:

Precautions for safe handling:	Handle in accordance with good industrial hygiene and safety practices. Avoid contamination with diesel fuel, lubricants, oils, dirt or other chemicals, as contamination may affect product quality and SCR system performance. Wash hands thoroughly after handling.
Precaution for safe storage:	Store only in clean, tightly closed containers made of approved materials such as HDPE or stainless steel. Keep in a cool, dry and well-ventilated area away from direct sunlight and incompatible materials. Protect the product from contamination during storage and handling.
Recommended storage temperature:	Store between -11°C and 30°C. Avoid prolonged exposure to temperatures above 30°C or below the freezing point for extended periods to maintain product quality.

8. Exposure Control and Personal Protection:

Engineering Controls:	No special engineering controls are normally required. Provide adequate ventilation in work areas and maintain good industrial hygiene practices during handling.
Respiratory Protection:	Respiratory protection is not normally required under normal conditions of use. If mists are generated during processing, use appropriate respiratory protection where ventilation is insufficient.
Hand Protection:	Wear suitable chemical-resistant protective gloves during prolonged or repeated handling to minimize skin contact.
Eye Protection:	Wear safety glasses or chemical splash goggles where there is a risk of splashing into the eyes.
Skin and Body Protection:	Normal work clothing is generally adequate. Protective clothing should be worn where repeated or prolonged skin contact is expected.
Hygiene Measures:	Wash hands thoroughly after handling. Do not eat, drink or smoke while using the product. Remove contaminated clothing and wash before reuse. Follow good industrial hygiene practices at all times.

9. Physical and Chemical Properties:

Appearance:	Clear, colourless liquid
Physical State:	Liquid
Odor:	Slight ammonia-like odour
Odor Threshold:	Not determined.

pH:	Approximately 9.0 – 10.0
Melting point:	Approximately -11°C
Initial Boiling point:	Approximately 100°C
Flash Point:	Not applicable (Non-flammable aqueous solution)
Evaporation Rate:	Similar to water
Flammability:	Non-flammable
Upper/lower explosive limits:	Not applicable
Vapor Pressure:	Similar to water
Vapor Density:	Not determined
Relative Density:	1.087 – 1.093 at 20°C
Solubility:	Completely miscible in water
Partition coefficient (n-octanol/water):	Not applicable
Auto-ignition Temperature:	Not applicable
Decomposition Temperature:	

10. Stability and Reactivity:

Incompatible materials:

11. Toxicological Information:

Acute toxicity:	Based on available information, the finished product is not expected to present an acute health hazard under normal conditions of use. The product has low toxicity; however, ingestion of large quantities may cause gastrointestinal discomfort.
Serious eye damage/eye irritation:	Direct contact with the eyes may cause mild to moderate irritation, redness and watering. Rinse immediately with plenty of clean water if contact occurs.
Skin corrosion/irritation:	Prolonged or repeated skin contact may cause mild irritation or dryness in sensitive individuals. No significant adverse effects are expected under normal handling conditions.
Respiratory or Skin Sensitization:	Not expected to cause respiratory or skin sensitization under normal conditions of use. Inhalation of mists generated during spraying or processing may cause slight respiratory discomfort.
Germ Cell Mutagenicity:	Based on available information, the product is not expected to present a mutagenic hazard.
Carcinogenicity:	No components of this product are classified as carcinogenic by IARC, NTP or OSHA at concentrations requiring disclosure.
Reproductive Toxicity:	Not expected to cause reproductive toxicity under normal conditions of use.
Specific target organ toxicity - single exposure:	No known target organ effects are expected following single exposure under normal conditions of use.
Specific target organ toxicity - repeated exposure:	No known adverse effects are expected following repeated exposure under recommended handling conditions.
Aspiration hazard:	Not classified as an aspiration hazard due to the aqueous nature of the product.

Potential Health Effects:
Inhalation: Inhalation of vapours is unlikely under normal conditions. Exposure to mists may cause slight irritation of the respiratory tract.
Skin Contact: Repeated or prolonged contact may cause mild skin irritation in sensitive individuals.
Eye Contact: May cause temporary irritation, redness and discomfort upon direct contact with the eyes.
Ingestion: Accidental ingestion may cause nausea, stomach discomfort or vomiting. Large quantities should be treated by medical personnel.

12. Ecological Information:

12.1	**Ecological Toxicity:** The product is not expected to present significant environmental hazards when used and disposed of properly. Large releases should be prevented from entering natural water bodies.
12.2	**Persistence and degradability:** The urea component is readily biodegradable under normal environmental conditions, while the water component presents no environmental concern.
12.3	**Bioaccumulation Potential:** The product is not expected to bioaccumulate in the environment.
12.4	**Mobility in Soil:** The product is completely soluble in water and may migrate through soil if released in large quantities.
12.5	**Results of PBT and vPvB assessment:** Based on available information, this product does not contain substances classified as PBT (Persistent, Bioaccumulative and Toxic) or vPvB (very Persistent and very Bioaccumulative).
12.6	**Other adverse effects:** No significant adverse environmental effects are known. Avoid unnecessary discharge into drains, surface water and soil.

13. Disposal Consideration:

Recommendations: Dispose of the product in accordance with applicable local, regional, and national waste management regulations. Avoid generating or releasing dust during disposal.	
Waste Treatment Methods:	Dispose of unused product, contaminated absorbents and waste material in accordance with applicable local, regional and national regulations. Wherever possible, prevent unnecessary release into the environment.
Packaging Disposal:	Empty containers should be completely drained and rinsed where appropriate before recycling or disposal in accordance with local waste management regulations.

Land Transport (DOT):-	
UN Number:	Not applicable
Proper Shipping Name:	Not regulated as dangerous goods.
Class:	Not applicable.
Packaging Group:	Not applicable
Air transport (IATA):-	
UN Number:	Not applicable
Proper Shipping Name:	Not regulated as dangerous goods.
Class:	Not applicable.
Packaging Group:	Not applicable
Sea Transport (IMO):-	
UN Number:	Not applicable
Proper Shipping Name:	Not regulated as dangerous goods.
Class:	Not applicable.
Packaging Group:	Not applicable

16. Other Information:

Date of Certification 22/07/2026

1st Surveillance due 21/07/2027

2nd Surveillance due

21/07/2028

Certificate Expiry 21/07/2029

Compliance Standard: This Safety Data Sheet (SDS) is prepared in accordance with the Globally Harmonized System (GHS) of Classification and Labelling of Chemicals (Latest Revision).

Other Information

CAS: Chemical Abstracts Service

EC: European Commission

ACGIH: American Conference of Governmental Industrial Hygienists

NIOSH: US National Institute for Occupational Safety and Health

OSHA: US Occupational Safety and Health Administration

TLV: Threshold Limit Value

TWA: Time Weighted

Average STEL: Short Term

Exposure Limit

LC50: Lethal Concentration, 50 percent

LD50: Lethal Dose, 50 percent

IMDG: International Maritime Dangerous Goods

IATA: International Air Transport Association

TSCA: Toxic Substances Control Act of USA

DSL: the Domestic Substances List of

Canada

NDSL: the Non-Domestic Substances List of Canada

Additional Information:
The information provided in this Safety Data Sheet is believed to be accurate and is given in good faith based on current knowledge. It is the responsibility of the user to ensure suitability of the product for their specific application and conditions of use.

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Regulatory Compliance Statement:
This Safety Data Sheet has been prepared in accordance with the Globally Harmonized System (GHS) of Classification and Labelling of Chemicals.

Under normal conditions of handling and use, the product is not classified as hazardous and is not regulated as dangerous goods for transport under standard DOT, IATA, or IMO regulations.