

## BLUE-TEC Diesel Exhaust Fluid (DEF) / AdBlue

### Product Description

**BLUE-TEC** is a high-purity aqueous urea solution containing 32.5% automotive-grade urea specifically developed for SCR emission control systems. When injected into the exhaust stream, AdBlue converts harmful nitrogen oxide (NOx) emissions into harmless nitrogen and water vapor, helping diesel engines comply with stringent environmental regulations while maintaining engine performance and fuel efficiency.

Manufactured under strict quality control procedures using high-purity synthetic urea and demineralized water, PETROVOLL BLUE-TEC provides reliable SCR system performance and protection against deposits, catalyst contamination, and injector blockage.

#### Usage Recommendation

PETROVOLL BLUE-TEC should be replenished according to the vehicle manufacturer's recommendations and maintained at the required level in the SCR system reservoir. AdBlue® consumption typically ranges from 3-7% of diesel fuel consumption depending on vehicle type, engine technology, and operating conditions.

### Product Features & Benefits

- **Effective NOx Reduction:** Helps reduce harmful nitrogen oxide emissions and supports compliance with modern emission regulations.
- **High Purity Formulation:** Manufactured using high-purity synthetic urea and demineralized water to minimize contamination risks.
- **SCR System Protection:** Helps prevent deposit formation, injector blockage, and catalyst poisoning.
- **Consistent Performance:** Provides reliable operation under a wide range of environmental and operating conditions.
- **OEM Compatibility:** Suitable for use in vehicles and equipment requiring ISO 22241 compliant AUS 32 fluid.
- **Easy Handling:** Ready-to-use solution requiring no dilution or additives.

### Application

**BLUE-TEC** is a premium Diesel Exhaust Fluid (DEF), also known as AdBlue®, formulated with high-purity automotive-grade urea (AUS 32) and demineralized water. It is designed for use in Selective Catalytic Reduction (SCR) systems installed in modern diesel-powered vehicles and equipment.

### Quality Level

- AUS 32
- ISO 22241 Compliant
- Suitable for SCR Emission Control Systems
- Manufactured from High-Purity Synthetic Urea and Demineralized Water

### Meets and Approvals

- ISO 22241
- AUS 32 Specification
- SCR System Requirements of Major OEMs
- Euro IV
- Euro V
- Euro VI Emission Standards

### Recommended For

- Heavy-duty trucks and buses
- Commercial vehicles
- Construction and mining equipment
- Agricultural machinery
- Power generation equipment
- Passenger vehicles requiring AdBlue® / DEF

### Usage Instructions

- Use only in the designated AdBlue® / DEF tank.
- Do not add to diesel fuel tanks.
- Do not dilute with water or mix with other fluids.
- Use clean dispensing equipment dedicated exclusively to AdBlue® service.
- Avoid contamination during handling and storage.



## Typical Properties

| Property                     | Unit              | Specification           |
|------------------------------|-------------------|-------------------------|
| Urea Content                 | % wt              | 31.8 – 33.2             |
| Nominal Urea Content         | % wt              | 32.5                    |
| Density @ 20°C               | kg/m <sup>3</sup> | 1087 – 1093             |
| Refractive Index @ 20°C      | -                 | 1.3814 – 1.3843         |
| Freezing Point               | °C                | Approx. -11             |
| pH (10% Solution)            | -                 | 9.0 – 10.0              |
| Appearance                   | -                 | Clear, Colorless Liquid |
| Insoluble Matter             | mg/kg             | ≤ 20                    |
| Biuret                       | % wt              | ≤ 0.30                  |
| Ammonia                      | mg/kg             | ≤ 200                   |
| Aldehydes                    | mg/kg             | ≤ 5                     |
| Phosphate (PO <sub>4</sub> ) | mg/kg             | ≤ 0.5                   |
| Calcium (Ca)                 | mg/kg             | ≤ 0.5                   |
| Iron (Fe)                    | mg/kg             | ≤ 0.5                   |
| Copper (Cu)                  | mg/kg             | ≤ 0.2                   |
| Zinc (Zn)                    | mg/kg             | ≤ 0.2                   |
| Aluminum (Al)                | mg/kg             | ≤ 0.5                   |

## Health, Safety and Environmental

- Non-flammable under normal storage and handling conditions.
- Avoid prolonged contact with eyes and skin.
- In case of contact, rinse thoroughly with clean water.
- Do not discharge into surface water, drains, or soil.
- Dispose of containers and residues in accordance with local regulations.
- Refer to the Safety Data Sheet (SDS) for detailed safety information.

## Storage and Handling

- **Storage Conditions:** Store in clean, sealed containers away from direct sunlight and contamination sources.
- **Recommended Storage Temperature:** -5°C to +30°C
- **Freezing:** Product may freeze at approximately -11°C. Frozen product can be thawed and reused without affecting performance.
- **Shelf Life:** Up to 12 months when stored under recommended conditions.
- **Handling Precautions:** Use dedicated equipment made from compatible materials such as stainless steel or approved plastics to prevent contamination

