

# Cobra DEF Diesel Exhaust Fluid

#### Features and Benefits

- API Certified
- · Meets ISO 22241-1:2019 quality standard
- · Nontoxic, nonpolluting, nonhazardous and non-flammable solution
- · Reduces harmful emissions by up to 90%
- · Increases fuel efficiency

**Cobra DEF** is a 32.5% aqueous urea solution, AUS 32, a manufactured product of technically pure urea mixed with deionized water designed to meet the specifications of ISO 22241-1:2019 for NOx abatement technologies.

**Cobra DEF** is certified as a Diesel Exhaust Fluid by the American Petroleum Institute.

**Cobra DEF** transforms harmful nitrogen oxide emissions from diesel powered vehicles into harmless water vapor and nitrogen.

**Cobra DEF** is contained in a separate tank and sprayed from the SCR (Selective Catalytic Reduction) systems into the exhaust gases.

## **Typical Results**

| TEST METHOD              | Units            | Typical                | Min    | Max    |
|--------------------------|------------------|------------------------|--------|--------|
| Urea Content             | % ( <i>m/m</i> ) | 32.5                   | 31.8   | 33.2   |
| Density at 20°C          | kg/L             | 1.0899                 | 1.087  | 1.093  |
| Refractive Index at 20°C | -                | 1.3830                 | 1.3814 | 1.3843 |
| Alkalinity (as Ammonia)  | % ( <i>m/m</i> ) | <0.1                   | -      | 0.2    |
| Biuret                   | % ( <i>m/m</i> ) | 0.20                   | -      | 0.3    |
| Aldehydes                | mg/kg            | <0.5                   | -      | 5      |
| Insoluble matter         | mg/kg            | <0.1                   | -      | 20     |
| Phosphates               | mg/kg            | <0.09                  | -      | 0.5    |
| Calcium                  | mg/kg            | <0.1                   | -      | 0.5    |
| Iron                     | mg/kg            | <0.1                   | -      | 0.5    |
| Copper                   | mg/kg            | <0.1                   | -      | 0.2    |
| Zinc                     | mg/kg            | <0.1                   | ı      | 0.2    |
| Chromium                 | mg/kg            | <0.1                   | ı      | 0.2    |
| Nickel                   | mg/kg            | <0.1                   | -      | 0.2    |
| Aluminum                 | mg/kg            | <0.1                   | -      | 0.5    |
| Magnesium                | mg/kg            | <0.1                   | -      | 0.5    |
| Sodium                   | mg/kg            | <0.1                   | -      | 0.5    |
| Potassium                | mg/kg            | <0.1                   | -      | 0.5    |
| Identity (FTIR)          |                  | Identical to reference | -      | -      |



## Shelf life as a Function of Temperature

| Constant Ambient<br>Storage Temperature<br>(°C) | Minimum Shelf Life<br>(Months)                                     |
|---|--|
| ≤10   | 36   |
| ≤25   | 18   |
| ≤30ª  | 12   |
| ≤35   | 6  |
| >35   | Significant loss of shelf life:<br>check every batch before<br>use |

<sup>a</sup> To Prevent decomposition of AUS 32, prolonged transportation or storage above 30 °C should be avoided.

Never store Cobra DEF in direct sunlight.

### Sizes and Order Codes

| SIZE                | Cobra DEF  |
|---------------------|------------|
| 9.46 L / 2.5 US Gal | FBB0011610 |