

# TITAN™ DEF

## Diesel Exhaust Fluid



**Safe, easy to use, non-toxic,  
non-flammable formula**

**TITAN™ DEF (Diesel Exhaust Fluid)** is a high-purity and non-toxic Nitrogen Oxide (NOx) emissions reducing agent specially formulated for use in Selective Catalytic Reduction (SCR) Emission Control systems in diesel-powered vehicles. It effectively converts harmful NOx emissions to harmless nitrogen and water to prevent pollutants from entering the atmosphere.

The high-purity 32.5% aqueous urea solution (urea in 67.5% deionized water) is injected into the hot exhaust gas stream, which then vaporizes and decomposes to form ammonia and carbon dioxide. It then reacts with the SCR system catalytic converter and the NOx (oxides of nitrogen) in the exhaust to convert NOx emissions to nitrogen and water.

TITAN™ DEF meets the stringent 2010 emissions standards set by the EPA, and other applicable standards for use in all SCR systems. It is a top quality, cost-effective solution for commercial fleet managers and is available through Waterford Oil in bulk and varying sized containers. Ask your Waterford Oil representative for more information.

### Special Handling and Warning

According to ISO 22241, DEF requires the following care when handling. DEF is temperature sensitive and should be stored between 12°F and 86°F in a clean, closed container, out of direct sunlight for optimal shelf life. If frozen, it may expand by 7% and can be thawed without degradation.

DEF is not compatible and is corrosive to some metals and plastics. It should not be stored or come in contact with materials made of aluminum, copper, brass, zinc, lead, magnesium, mild steel and plastics, or metals coated with nickel. DEF is compatible with high-density polyethylene and stainless steel and should be stored in containers free of any contaminants.

If DEF spills, it may be cleaned with water. Please ask a Waterford Oil sales representative for more information.



## FEATURES

- Formulated for use in all SCR emission control systems
- Meets ISO 22241 specifications
- Safe, easy to use, non-toxic, non-flammable formula

**TITAN™ DEF meets stringent EPA 2010 emission performance standards for NOx emissions for diesel-powered vehicles with SCR (Selective Catalytic Reduction) systems.**

Properties	Typical Values
Urea content, %	32.5
Boiling Point	212°F
Freeze Point	11.3°F
Density/Specific Gravity, at 20°C, kg/m <sup>3</sup>	1.087–1.093
Water Soluble	Yes
Appearance	Clear liquid
Odor	Slight ammonia