



Diesel Exhaust Fluid (DEF)

Aqueous Urea Solution for Your SCR NOx Reduction Systems



Why Fleetguard DEF?

Diesel Exhaust Fluid (DEF) is one of the key elements involved in the SCR process. It is a nontoxic solution of 67.5% deionized water and 32.5% high purity grade urea. DEF helps to convert NOx into harmless nitrogen and water vapor. It is stable, colorless, odorless, and meets accepted international standards for purity and composition.

Fleetguard DEF

Fleetguard Diesel Exhaust Fluid (DEF) is designed specifically for modern integral Selective Catalytic Reduction (SCR) NOx reduction systems. Carefully blended with high purity synthetic urea dissolved in deionized water, the finished formulation is further filtered to ensure maximum protection for internal SCR system components.

Formulated for SCR System Protection

- Reduces SCR component wear
- Extends SCR catalyst life

Performance Tested

- Meets ISO 22241-1 and AUS 32 specifications
- Meets or exceeds OEM specifications



CC2902

Packaging Options to Meet Your Needs

- Available in bulk, plastic totes, and plastic drums
- Bulk delivery from blending facility
- Smaller package sizes with built-in dispensing

Fleetguard DEF products available for OEM First Fill and Aftermarket

| Packaging Size | Air Shield Part # | New Part # |
|------------------------------------|-------------------|------------|
| (4) 1 Gal. DEF (3.78 L) | 728770 | CC2902 |
| (2) 2.5 Gal. DEF (9.45 L) | 729566 | CC2903 |
| 55 Gal. DEF Drum (208 L) | 749714 | CC2904 |
| 330 Gal. DEF Plastic Tote (1250 L) | 728802 | CC2906 |
| Bulk DEF | CC36057 | CC36057 |

* Some part numbers may not be available in all countries. Contact your local Customer Assistance Center for product availability.

Fleetguard Diesel Exhaust Fluid

Frequently Asked Questions

❓ **With a freezing level at 11 °F (-12 °C), should drivers in very cold temperatures be concerned?**

The installation of an SCR system will provide for heating of the SCR tank and supply lines. There have been no reported issues based on our winter reliability and growth testing in Canada, nor has this been an issue among Northern European fleets in areas like Norway. We know DEF thaws quickly without changing its efficacy, and see no problem in allowing for the short time it takes to warm up using the heat of the engine when you start the truck.

❓ **DEF is corrosive to aluminum. What will storage tanks be made of?**

They will be made of an appropriate, heavy-duty and tamper-free form of durable composite material (stainless steel and polypropylene).

❓ **What is urea?**

Urea is a compound of nitrogen that turns to ammonia when heated. It is used in a variety of industries, including as a fertilizer in agriculture. Urea is naturally occurring, but is also commonly made from natural gas.

❓ **How does DEF work within an SCR system?**

The goal of an SCR system is to reduce levels of NOx (oxides of nitrogen emitted from engines) that are harmful to our health and the environment. SCR is an aftertreatment technology that treats exhaust gas downstream of the engine. Small quantities of DEF (automotive grade urea solution) are injected into the exhaust stream converting NOx into harmless nitrogen and water.

❓ **What is the DEF shelf life and storage?**

When stored between 10 and 90 degrees Fahrenheit, DEF will last a minimum of 1 year without problems. Big bulk dispensers (1,000 gallon) have climate control systems. However, Intermediate Bulk Containers (IBC) do not have climate control systems. Therefore, in cold temperature regions it is recommended to store DEF-IBC's in a storage unit. In warm temperature regions it is recommended to store DEF-IBC's in a shaded area to avoid potential water evaporation and conversion to ammonia.

❓ **What are the advantages for the fleet in using SCR technology?**

Cummins 2010 engines will deliver what customers need in these challenging economic times. Cummins 2010 heavy duty engines utilizing SCR will provide substantial fuel economy improvement of up to 5%. SCR catalyst technology allows much greater NOx conversion efficiency, thereby allowing the engine to be fully optimized, which contributes to this fuel economy improvement. Another benefit to the improved fuel consumption is less frequent Diesel Particulate Filter (DPF) cleanout, thereby further reducing costs.