

PRODUCTION DESCRIPTION AND SPECIFICATION



US Specification



Canadian / European Specification

DIESEL EXHAUST FLUID:

DEF (Diesel Exhaust Fluid) is one of the key elements of the SCR (Selective Catalytic Reduction) process. It is a nontoxic solution of 67.5% purified water and 32.5% urea. When injected into hot exhaust as a fine mist and passed over a catalyst, DEF helps convert NOx (nitrogen oxide) into nitrogen gas and water vapor-- two clean and harmless components of the air we breathe. DEF is stable, colorless and odorless, and meets accepted international standards for purity and composition.

SCR (Selective Catalytic Reduction):

SCR (Selective Catalytic Reduction) uses basic chemistry to reduce NOx emissions emitted by diesel engines through a process that is simple, extremely efficient, very reliable and safe. The major components of the process are hot exhaust, Diesel Exhaust Fluid and a catalytic converter. Vaporized DEF and hot exhaust gases enter a catalytic converter located in the exhaust system after the diesel particulate filter. The catalytic converter contains a catalyst,



which is a substance that causes or accelerates a chemical reaction, without being affected itself. [Catalysts are common in everyday life; for example, gasoline powered vehicles have used catalytic converters to control emissions for several decades.]

Product Information:

High purity urea solution for treatment of SCR equipped diesel engines.

Optimal storage temperature 23°F to 86°F.

Avoid direct exposure to sunlight.

Non-flammable / Non-hazardous / Non-toxic / Non-explosive

DEF is a chemical product, not a petroleum product.

Complies with ISO-22241-1

ISO-22241-1 Quality Standard specification

Specification	Limits	Units
Urea	31.8 – 33.2	% by weight
Density/Specific Gravity (at 25°C / 77°F)	1.094 (approx. 9.2 lbs./gal.)	
Refractive Index (at 20°C / 68°F)	1.3814 – 1.3843	
Alkalinity as NH3	0.2 max.	% by weight
Biuret	0.3 max.	% by weight
Aldehyde	0.0005 max.	% by weight
Insolubles	0.002 max.	% by weight
Phosphate (PO4)	0.00005 max.	% by weight
Calcium	0.00005 max.	% by weight
Iron	0.00005 max.	% by weight
Copper	0.00002 max.	% by weight
Zinc	0.00002 max.	% by weight
Chromium	0.00002 max.	% by weight
Nickel	0.00002 max.	% by weight
Aluminum	0.00005 max.	% by weight
Magnesium	0.00005 max.	% by weight
Sodium	0.00005 max.	% by weight
Potassium	0.00005 max.	% by weight
Appearance	Colorless Clear Liquid	

Your Wholesale DEF Supplier

10L Jugs **200L Drums** **1000L Tanks** **BULK 20,000 L Flexi Tank**

Packaged DEF
Conveniently packaged for your business needs.
Easy to transport | Pump and Tank Systems

Bulk for Export & Storage
Strategically streamlined to ensure best pricing
Around the Corner or Around the Globe

Packing Options:

Packing	Liters	Gallons	Min Order: 1 FCL
Jug	10L	2.5 gal	2000 Jugs
Drum	100L	55 gal	80 Drums
Tank	1000 L	300 gal	16 Tanks
Bulk	20,000 L	5,250 gal	1 FCL

Safety:

Handling information: Ensure good ventilation at the workplace. Avoid prolonged or repeated skin contact. Avoid contact with eyes. Material Safety Data Sheet containing detailed information about this product is available on request.

Handling and Storage :

The shelf life of DEF is directly related to the temperature at which it is stored. Storage temperature between 12° and 86° F are recommended to maintain optimal shelf life of up to two years. If DEF freezes, its efficacy will not be effected upon thawing.



To maintain the purity of DEF and not harm the SCR Catalyst System care must be taken regarding the material of construction for all items that come in contact with the DEF solution. Included from the ISO-22241-1 standards are the recommended and not recommended materials for contact with DEF.

DO'S AND DON'TS FOR PROPER USE OF DEF

- Do fill DEF in designated DEF Tank
- Do keep DEF dispense equipment clean, and free from dust or dirt
- Do use only dedicated DEF equipment when handling/dispensing DEF
- Do not fill DEF into Diesel fuel tank
- Do not fill Diesel fuel into DEF tank
- Do not add water to DEF