



Genuine Chemistry
From the Manufacturer of OEM Fluids



GC®

DEF (Diesel Exhaust Fluid)

Approved For Use In
All Diesel SCR Systems

DESCRIPTION and APPLICATIONS

GC® DEF (Diesel Exhaust Fluid) is manufactured with 32.5% high-purity synthetic urea and 67.5% deionized water and is designed for use in passenger vehicles, trucks, and construction & agricultural equipment. It is compatible with all Tier 4 final compliant equipment using Selective Catalytic Reduction (SCR) technology. **GC® DEF** prevents SCR breakdown, reduces harmful nitrogen oxide emissions by up to 90% and improves fuel efficiency by up to 8%. It is a simple-to-use, low cost, clean solution for meeting 2010 EPA Clean Air Act requirements.

Purity of diesel exhaust fluid is important to maintaining a functioning SCR system. Any chemical impurity in DEF can lead to failure of an SCR system, making it very important to use only DEF products meeting ISO 22241-1 standards. GC® DEF-32.5 is a stable, colorless, nonflammable, nontoxic fluid that conforms to the ISO-22241-1 specification.



PHYSICAL and CHEMICAL PROPERTIES

Boiling Point:	>212°F
Crystallization Point:	12°F
Pounds/Gallons:	9.10
Specific Gravity:	(Water=1)1.09
Vapor Density:	(Air=1) 0.6 H ₂ O,>1
Water Solubility:	100%
Appearance:	Colorless Clear Liquid
Odor:	None to Slight Ammonia
Evaporation Rate:	<1

MATERIALS NOT RECOMMENDED FOR USE WITH GC DEF

- Carbon Steels, Zinc Coated Carbon
- Steels, and Mild Iron
- Nonferrous metals and alloys:
- Copper, Copper Alloys, Zinc, Lead
- Solders containing Lead, Silver, Zinc or Copper
- Aluminum, Aluminum Alloys
- Magnesium, Magnesium Alloys
- Plastics or metals coated with Nickel

TECHNICAL DATA SHEET

Ver. 22-01

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SPECIFICATIONS and APPROVALS

Meets or exceeds these requirements:

- ISO 22241
- AUS 32 (2.5 Gallon) • AUS 33 (55 Gallon) • AUS 34 (330 Gallon)

STORAGE and HANDLING INSTRUCTIONS

DO NOT MIX WITH DIESEL FUEL

- Optimal storage temperature: 23°F to 77°F.
- DEF will freeze at 12°F.
- Avoid direct exposure to sunlight.
- ISO 22241 standards require the use of only stainless steel and/or certain plastics, such as high-density polyethylene
- (HDPE) or polypropylene, to store DEF for the prevention of contamination and SCR failure.

OTHER MATERIALS RECOMMENDED FOR USE WITH GC DEF:

Highly alloyed austenitic Cr- Ni-Mo -steels or stainless steel:

304 (S304 00), 304L (S30403), 316 (S31600) and 316L (S 31603) in accordance with ASTM A240, ASTM A276, and ASTM A312

Titanium:

Ni- Mo- Cr-Mn-Cu-Si-Fe Alloys, e.g., Hastello y c/c-27 6

Polypropylene, free of additives

Polyethylene, free of additives

Perfluoro alkoxyl Alkane (PFA), free of additives

Polyfluroethylene (PFE), free of additives

Polyvinylidene fluoride (PVDF), free of additives

Polytetrafluoroethylene (PTFE), free of additives

Copolymers of Vinylidene fluoride and Hexafluoropropylene, free of additives

SHIPPING INFORMATION

Part #	Size (Gallons)	Case Qty.	Cases /Pallet	Case Weight
10000053	2.5	2	40	22.75
10000055	55	1	4	539.3
10000051	330	1	1	3,086

DEF SHELF LIFE vs. TEMPERATURE

Constant Ambient Storage Temperature	Shelf Life In Months
<50 °F (10°C)	36
<77 °F (25°C)	18
<86 °F (30°C)	12
<95 °F (35°C)	6
<104°F (40°C)	2

Shelf life for product in inventory should be based on the average daily temperature, not the day's maximum temperature.