

Diesel Exhaust Fluid Dispensing Systems



What is BlueDEF®?

Diesel Exhaust Fluid

BlueDEF® diesel exhaust fluid is the mixture of high purity synthetic urea and deionized water that is used in Selective Catalytic Reduction (SCR) systems on diesel engines. BlueDEF® is injected into the exhaust stream via a controlled dosing module where the water vaporizes leaving ammonia molecules free to travel in to the catalytic converter where it reacts and neutralizes the NOx molecules, converting it to nitrogen and water vapor - two harmless and natural components of the air we breathe.



BlueDEF® diesel exhaust fluid meets ISO 22241 standards and is certified by the American Petroleum Institute.

PERFORMANCE DRIVEN

Purity

SCR systems are sensitive to potential chemical impurities in the urea solution. Therefore it is essential to maintain high standards of diesel exhaust fluid quality. ISO standard 22241 was created to insure fluid quality of diesel exhaust fluid. BlueDEF® is manufactured in accordance to these strict standards giving you the peace of mind you need using it in your SCR system. With BlueDEF®, you get the highest quality diesel exhaust fluid you can buy, guaranteed!

Delivery

ISO standard 22241 was also created to provide direction for handling, transportation and storage of diesel exhaust fluid. For almost 40 years, Old World Industries, maker of PEAK® Performance products, has produced and distributed functional fluids for heavy duty and automotive applications. That's why, today, you can depend on us to develop a smart, efficient and customizable BlueDEF® program that deliveries the highest quality product whenever you need it, wherever you need it, according to ISO standard 22241.

Equipment

Nobody likes down time. Down time costs money. That's why maintaining diesel exhaust fluid integrity is vital to the efficient and long term operation of SCR equipped vehicles as well as diesel exhaust fluid dispensing systems.

BlueDEF® equipment is designed specifically for dispensing diesel exhaust fluid, providing you the integrity you need and meeting the tough standards of ISO 22241. Whether you're looking for a pump or a complete dispensing system, our BlueDEF® equipment program has everything you need to store and dispense your BlueDEF® diesel exhaust fluid.

You Have Choices...

To determine which dispensing system best suits your operating requirements you need to answer three simple questions:

- 1. What is the size of the fleet to be serviced today/tomorrow and how much diesel fuel will be used?
- 2. What size package will deliver the greatest level of operating effeciency?
- 3. What is your application environment and what versatility will you require?









					Bulk
Recommended Storage / Dispensing System Size		Drum system	Tote system	Mini Bulk system	Bulk system
# Of SCR Vehicles		1 – 5	8 – 13	26 – 80	160+
Diesel Fuel In Gallons Per Week		500 – 2,000	3,000 – 5,000	10,000 – 30,000	60,000+
BlueDEF®	Per Week	10 – 40	60 – 100	200 – 600	1,200+
Usage In Gallons	Per Month	40 – 160	240 – 400	800 – 2,400	4,800+
	Per Year	640 – 2,560	3,840 – 6,400	12,800 – 38,400	76,800+

NOTE: * Above calculations based at 3% usage at average fuel economy of 6 miles per gallon. Container volume/mileage usage may vary depending on vehicle dosage rate.

Ensuring BlueDEF® Purity

Closed, Sealed & Secure

Maintaining BlueDEF® purity is vital to the efficient and long term operation of SCR equipped vehicles. That's why a proprietary tamper-evident container valve system is standard on all BlueDEF® drums, totes and bulk containers. Adding a matching dispense coupler to your BlueDEF® dispensing system completes the closed system. Closed, Sealed, Secure from fill thru dispense, these closed systems help to...

- 1. Avoid product contamination
- 2. Eliminate spillage
- 3. Protect your investment







BlueDEF Pumps



At the heart of our dispensing systems are our BlueDEF® pumps. Built by experienced builders of chemical equipment, these pumps are designed specifically for dispensing diesel exhaust fluid and are manufactured with ISO 22241 compatible materials.

Diesel Exhaust Fluid

1/2 HP Smart Start Centrifugal

The SMART START PUMP is designed to take the worry out of DEF dispensing. Its unique technology reduces pump failures, keeping fleets up and running at all times.



- Electronic Pressure Sensor On/Off function is controlled by nozzle
- Strong 1/2 HP motor
- Time-Out Function Automatically shuts off pump after 12 seconds of non-use to prevent pump burn out.
- Heavy Duty Stainless Steel pump housing
- · Self priming
- · Built in thermal and current overload protection
- Dual Voltage 115V/230V 60 Hz
- Liquid temperature range: from $+32^{\circ}F$ to $+113^{\circ}F$
- · Max ambient temperature: +104°F
- Maximum operating pressure: 8 bar (116 psi)
- Flow rate of 8 to 10 gpm
- 3 YEAR "HASSLE FREE" WARRANTY

1/3 HP Manual Start Centrifugal



- 1/3 HP motor
- · Polypropylene pump housing
- Self priming
- Built in thermal and current overload protection
- 115V 60 Hz
- Liquid temperature range: from +32°F to +113°F
- Max ambient temperature: +104°F
- Maximum operating pressure:
 3.5 bar (51 psi)
- Flow rate of 6 to 7 gpm
- 2 year "Hassle Free" warranty

Air Double Diaphragm



- 3/4 Double Diaphragm pump
- · No lube, no stall design
- Polypropylene seats
- · Self priming
- Liquid temperature range: from +32°F to +113°F
- Max ambient temperature: +104°F
- Maximum operating pressure:
 6 bar (90 psi)
- Flow rate of 6.5 to 7.5 gpm
- · 2 year "Hassle Free" warranty

Portable 12V Diaphragm



- · Polypropylene pump housing
- 12V DC Diaphragm pump
- 12' power cord with in-line fuse and battery clips
- · Self priming
- Liquid temperature range: from +32°F to +113°F
- Max ambient temperature: +104°F
- Maximum operating pressure:2.5 bar (35 psi)
- Flow rate of 7 gpm
- · 2 year "Hassle Free" warranty

Pump Comparison Chart

All BlueDEF® pumps are specifically designed and engineered for pumping Diesel Exhaust Fluid. Strong delivery pressure makes them ideal for use in dispensing BlueDEF® from drums or totes. These pumps are available in our complete systems or can be ordered separately.

1/2 HP Smart Start	1/3 HP Manual Start	Air Double Diaphragm	Portable
Centrifugal	Centrifugal		12 V Diaphragm
			A CONTRACT AT

Pump Type	Centrifugal	Centrifugal	¾" Double Diaphragm	Diaphragm
Horsepower	1/2 HP	1/3 HP	N/A	N/A
Power Source	Dual Voltage 115v/230v 60Hz	115v/60Hz	Powered by shop air compressor	12 Volt DC
Flow Rate	8 to 10 gpm	6 to 7 gpm	6.5 – 7.5 gpm	7 gpm
Max. Operating Pressure	8 bar (116 psi)	3.5 bar (51 psi)	6 bar (90 psi)	2.5 bar (35 psi)
Pump Housing Material	Stainless Steel	Industrial Grade Polypropylene	Industrial Grade Polypropylene	Industrial Grade Polypropylene
Plug Type			Powered by shop air compressor	
Self Priming*	YES	YES	YES	YES
Automatic Shut Off	YES	NO	NO	NO
Warranty	3 YEAR HASSLE FREE	2 Year Hassle Free	2 Year Hassle Free	2 Year Hassle Free

 $[*]Only\,need\,to\,prime\,when\,first\,connected\,to\,new\,container.$

Pump Only Part Number (For complete BlueDEF* dispensing systems, see following pages) DEF520COM-C12SS	DEFC13	DEFDP	DEFE12
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Stationary Drum System



Diesel Exhaust Fluid





Choose from:

Stainless Steel **Automatic Shut-Off Nozzle**

Rugged design for long life and reliable service. 19mm nozzle spout.



Dispense Hose

34" diameter, available in various lengths. All BlueDEF® hoses are made of sulfur free EPDM rubber that meets ISO 22241 guidelines for use with DEF fluid.



Suction Hose

• 1/2 HP Smart Start Centrifugal Pump

• 1/3 HP Manual Start Centrifugal Pump

· Air Double Diaphragm Pump

¾" diameter. All BlueDEF® hoses are made of sulfur free EPDM rubber that meet ISO 22241 guidelines for use with DEF fluid.



Stainless Steel Pump Bracket

Fits on top of drum and provides a stable base to hold your pump. Built in nozzle holder and hose hanger.



ADDITIONAL REQUIRED PART



Dispense Coupler

When using this dispensing system with BlueDEF® drums, be sure to order the Micro Matic **EPV Dispense** Coupler. Part# DEF756-008B

Compatible Materials of Construction

Stationary Drum System

The Stationary Drum, BlueDEF® dispensing system, comes with:

- Stainless steel automatic shut-off nozzle
- · Suction hose
- Dispense hose (in various lengths)
- Stainless steel pump bracket
- · Choice of pump
- Requires part # DEF756-008B, Micro Matic EPV Dispense Coupler to connect to BlueDEF® drums (sold separately)
- · Drum not included

Part Number	Dispense Hose Length	Pump & Pump Features (see page 4 & 5 for additional details on pumps)	
DEFCBBSS10	10′	1/2 HP Smart Start Centrifugal Pump	
DEFCBBSS20	20′	On/Off function is controlled by nozzleTime-Out FunctionSelf Priming	 Dual Voltage 115v/230v 60 Hz Flow rate of 8 to 10 gpm 3 year "Hassle Free" pump warranty
DEFC13BB10	10′	1/3 HP Manual Start (Centrifugal Pump
DEFC13BB20	20′	Manual On/OffSelf Priming	115v 60 HzFlow rate of 6 to 7 gpm2 year "Hassle Free" pump warranty
		Air Double Diapl	hragm Pump
DEFDPBB10	10′	Self Priming	Flow rate of 6.5 to 7.5 gpm2 year "Hassle Free" pump warranty
DEFE12VBB10	10′	Portable 12V Dia	ohragm Pump
DEFE12VBB20	20′	• 12' power cord with in-line fuse and battery c	•
DEFE12VBB30	30′	Self Priming	 2 year "Hassle Free" pump warranty

To connect to a BlueDEF® drum, simply add this coupler and your system is complete.

DEF756-008B	Micro Matic EPV Dispense Coupler (page 14) - for use with plastic valve on BlueDEF® drum DEF001	
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Accessories for your BlueDEF® dispensing system to consider:

DEF510COM-FMA	Flow Meter (page 14) - Accurately measures fluid usage. Easy to install in line or directly on nozzle	
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See page 14 & 15 for details on all accessories and replacement parts available for your BlueDEF® dispensing system.

Mobile Drum Cart System Features



Diesel Exhaust Fluid



Choose from:

Stainless Steel **Automatic Shut-Off Nozzle**

Rugged design for long life and reliable service. 19mm nozzle spout.



Dispense Hose

34" diameter, available in various lengths. All BlueDEF® hoses are made of sulfur free EPDM rubber that meets ISO 22241 guidelines for use with DEF fluid.



Suction Hose

3/4" diameter. All BlueDEF® hoses are made of sulfur free FPDM rubber that meet ISO 22241 guidelines for use with DEF fluid.



Stainless Steel Pump Bracket

Provides a stable base to hold your pump.

Pneumatic Front Tires



Swivel Locking Rear Wheel

Holds cart steady on flat and slanted surfaces.



System shown with 1/2 HP Smart Start Centrifugal Pump (Drum not included)

ADDITIONAL REQUIRED PART



Dispense Coupler

When using this dispensing system with BlueDEF® drums, be sure to order the Micro Matic **EPV Dispense** Coupler. Part# DEF756-008B



Heavy Duty Steel Construction

Compatible Materials of Construction

Powder coated finish. Built in nozzle holder and hose hanger on cart handle.

Mobile Drum Cart System

The Mobile Drum Cart, BlueDEF® dispensing system, comes with:

- · Heavy duty steel, 3 wheel drum cart
- Stainless steel automatic shut-off nozzle
- Suction hose
- Dispense hose (in various lengths)
- · Stainless steel pump bracket
- · Choice of pump
- Requires part # DEF756-008B, Micro Matic EPV Dispense Coupler to connect to BlueDEF® drums (sold separately)
- · Drum not included

Part Number	Dispense Hose Length	Pump & Pump Features (see page 4 & 5 for additional details on pumps)	
DEFCMCSS10	10′	1/2 HP Smart Start Centrifugal Pump	
		 On/Off function is controlled by nozzle 	 Dual Voltage 115v/230v 60Hz
DEECHCCCOO	20/	 Time-Out Function 	 Flow rate of 8 to 10 gpm
DEFCMCSS20	20′	Self Priming	3 year "Hassle Free" pump warranty
DEFC13MC10	10'	1/3 HP Manual Start (Centrifugal Pump
		Manual On/Off	• 115v 60 Hz
		Self Priming	 Flow rate of 6 to 7 gpm
DEFC13MC20	20′		• 2 year "Hassle Free" pump warranty
DEFDPMC10	10'	Air Double Diapl	hragm Pump
		Self Priming	 Flow rate of 6.5 to 7.5 gpm
DEFDPMC20	20′		• 2 year "Hassle Free" pump warranty
		Portable 12V Dia	ohragm Pump
DEFE12VMC20	20′	•	•
DEI E 12 VIVICZO	20	 12' power cord with in-line fuse and battery c 	
		Self Priming	 2 year "Hassle Free" pump warrar

To connect to a BlueDEF® drum, simply add this coupler and your system is complete.

DEF756-008B	Micro Matic EPV Dispense Coupler (page 14) - for use with plastic valve on BlueDEF® drum DEF001	
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Accessories for your BlueDEF® dispensing system to consider:

DEF510COM-FMA Flow Meter (page 14) - Accurately measures fluid usage. Easy to install in line or directly on nozzle	

See page 14 & 15 for details on all accessories and replacement parts available for your BlueDEF® dispensing system.

www.BlueDEF.com

Stationary Tote System





Diesel Exhaust Fluid



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Choose from:

- 1/2 HP Smart Start Centrifugal Pump
 1/3 HP Manual Start Centrifugal Pump
 Air Double Diaphragm Pump
 - Portable 12V Diaphragm Pump



Suction Hose

34" diameter. All BlueDEF® hoses are made of sulfur free EPDM rubber that meet ISO 22241 guidelines for use with DEF fluid.



Stainless Steel Pump Bracket

Mounts on tote and provides a stable base to hold your pump. Built in nozzle holder and hose hanger(Bracket design varies by type of pump selected).



Rugged design for long life and reliable service. 19mm nozzle spout.



Dispense Hose

34" diameter, available in various lengths. All BlueDEF® hoses are made of sulfur free EPDM rubber that meets ISO 22241 guidelines for use with DEF fluid.

ADDITIONAL REQUIRED PART



Dispense Coupler

When using this dispensing system with BlueDEF® totes, be sure to order the Micro Matic RSV Dispense Coupler.
Part# DEF744-048



Stationary Tote System

The Stationary Tote, BlueDEF® dispensing system, comes with:

- Stainless steel automatic shut-off nozzle
- Suction hose
- Dispense hose (in various lengths)
- Stainless steel pump bracket
- · Choice of pump
- Requires part # DEF744-048, Micro Matic RSV Dispense Coupler to connect to BlueDEF® totes (sold separately)
- Tote not included

Part Number	Dispense Hose Length	Pump & Pump Features (see page 4 & 5 for additional details on pumps)	
DEFCTBSS10	10′	1/2 HP Smart Start Centrifugal Pump	
DEFCTBSS20	20′	On/Off function is controlled by nozzleTime-Out FunctionSelf Priming	 Dual Voltage 115v/230v 60Hz Flow rate of 8 to 10 gpm 3 year "Hassle Free" pump warranty
DEFC13TB10	10′	1/3 HP Manual Start Centrifugal Pump	
DEFC13TB20	20′	Manual On/OffSelf Priming	115v 60 HzFlow rate of 6 to 7 gpm2 year "Hassle Free" pump warranty
DEFDPTB10	10′	Air Double Diaph • Self Priming	• Flow rate of 6.5 to 7.5 gpm • 2 year "Hassle Free" pump warranty
DEFE12V10	10′	Portable 12V Diap	ohragm Pump
DEFE12V20	20′	12' power cord with in-line fuse and battery cli	ips • Flow rate of 7 gpm
DEFE12V30	30′	Self Priming	 2 year "Hassle Free" pump warranty

To connect to a BlueDEF® tote, simply add this coupler and your system is complete.

DEF744-048 Micro Matic RSV Dispense Coupler (page 14) - for use with stainless steel valve on BlueDEF® totes DEF275S & DEF330S	
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Accessories for your BlueDEF® dispensing system to consider:

DEF510COM-FMA Flow Meter (page 14) - Accurately measures fluid usage. Easy to install in line or directly on nozzle
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Insulated Heat Blanket for Totes (page 15) - protects BlueDEF® fluid as well as equipment in cold weather conditions.

See page 14 & 15 for details on all accessories and replacement parts available for your BlueDEF® dispensing system.

Insulated Tote System



Diesel Exhaust Fluid



Fleet Dispensing System shown
Dimensions: 84" L x 47" W x 82" H (cabinet design may vary)

Insulated Tote System

The Insulated Tote, BlueDEF® dispensing system, comes with:

- Rust proof composite construction
- All doors have stainless steel industrial grade hinges
- · Removable nozzle door
- 25' dispense hose and hose reel
- Reinforced chassis forklift compatible frame
- Island pad bolt through brackets
- Stainless steel automatic shut-off nozzle
- Micro Matic RSV Stainless Steel Dispense Coupler
- Electrical panel (varies by model)
- Pre-wired for quick turnkey installation
- Available as a Fleet, Retail or Commercial dispensing system
- · Tote not included

Part Number	Specific System Features		
	Fleet Dispensing System with 1/2 HP Smart Start Centrifugal Pump		
	Pump Features (see page 4 for details)	Electrical Panel information	
DEFFTE2000	 On/Off function is controlled by nozzle 	 Plumbing to hose, reel, tote 	
	 Time-Out Function 	 UL listed NEMA electrical enclosure 	
	 Self Priming 	 15 amp circuit breaker* 	
	 Flow rate of 8 to 10 gpm 	 Punch outs for service and future options 	
	3 year "Hassle Free" warranty	 External GFI receptacle 	
	Wall mount bracket	*upgraded to 30 amp circuit breaker when Cold Weather Package (DEFCWF) added	
	Retail Dispensing System with Bennett 210S DEF Blue Fueler w/suction Pump		
	Retail Dispenser Features	Electrical Panel information	
DEFRTE3000	 Bennett model 210 DEF dispenser 	 UL listed NEMA electrical enclosure 	
	 Suction pump flow rate 10 gpm 	 30 amp circuit breakers 	
	 Displays dollars and gallons purchased 	 Punch outs for service and future options 	
	Weights and Measures approved meter	External GFI receptacle	
	Commercial Dispensing System with Bennett 110S DEF Blue Fueler w/suction Pump		
	Commercial Dispenser Features	Electrical Panel information	
DEFRTE3000C	 Bennett model 110 DEF dispenser 	 UL listed NEMA electrical enclosure 	
	 Suction pump flow rate 10 gpm 	 30 amp circuit breaker 	
	 Displays gallons pumped 	 Punch outs for service and future options 	
	• Pulsar	External GFI receptacle	
	Insulated Tota Enclosur	only – no dispensing system	
DEFNTE- BASIC	Insulated Tote Enclosure only – no dispensing system		
DASIC	(does contain 25' hose, hose reel, stainless steel nozzle and Micro Matic RSV Stainless Steel Dispense Coupler)		

Additional components for your BlueDEF® Dispensing System to consider:

DEFCWF	Cold Weather Package for Fleet Dispensing System (DEFFTE2000) - Insulation and 800 watt heater wired to panel		
DEFCWC	Cold Weather Package for Retail and Commercial Dispensing System (DEFFTE3000 & DEFFTE3000C) - Insulation and 800 watt heater wired to panel		
DEF900-OPW	OPW Wireless kit for Retail and Commercial Dispensing System (DEFFTE3000 & DEFFTE3000C) - Transmit information wirelessly up to 100 yards. Includes 1 indoor modem assembly, 1 outdoor modem assembly, 2 directional antennas with 20 foot antenna cables.		
DEF510COM- FMA	Flow Meter for Fleet Dispensing System (DEFFTE2000) - accurately measures fluid usage (page 14)		
DEF900- TE600	600 Gallon Tank for Insulated Tote System - Made of linear polyethylene, natural in color. One 6" center cap and three 2" NPT treaded openings. 250 lbs.		



Accessories

All BlueDEF® accessories are designed for dispensing Diesel Exhaust Fluid and are built with ISO 22241 compatible materials.

Couplers



Micro Matic EPV Dispense Coupler

Part# DEF756-008B

- For use with plastic valve on BlueDEF® drums DEF001
- Stainless steel



Micro Matic RSV Dispense Coupler

Part# DEF744-048

- For use with stainless steel valve on BlueDEF® totes DEF275S & DEF330S
- Stainless steel

Flow Meter



DEF Flow Meter

Part# DEF510COM-FMA

- Turbine measuring system
- Reinforced polyamide body
- Threaded input/output, aligned male/female depending on version
- Totalizer
- Flow indication
- Runs on 2 AAA batteries
- Measures gallons or litres

Nozzles



Stainless Steel Automatic Shut-Off Nozzle

Part# DEF510COM-NOZZ

- Rugged design for long life & reliable service
- 19mm nozzle spout
- · Stainless steel main stem
- · Duratuff lever and lever guard for additional durability

Magnetic Stainless Steel Automatic Shut-Off Nozzle with Swivel

Part# DEF510COM-SNOZZM

- Rugged design for long life & reliable service
- 19mm nozzle spout
- · Stainless steel main stem
- Duratuff lever and lever guard for additional durability

DEF Hose Reels



Hose reel assembly with 25' dispense hose	Part# DEFHR25HOSE
Hose reel assembly with 50' dispense hose	Part# DEFHR50HOSE
Hose reel assembly with 75' dispense hose	Part# DEFHR75HOSE
Hose reel assembly with 100' dispense hose	Part# DEFHR100HOSE

- · Open design allows for easy maintenance
- · Stores hose up and out of harm's way, greatly extending service life of hose



Hose



10' x ¾" DEF Hose	Part# DEF510COM-HOSE1
20' x ¾" DEF Hose	Part# DEF510COM-HOSE2
30' x ¾" DEF Hose	Part# DEF510COM-HOSE3
40' x ¾" DEF Hose	Part# DEF510COM-HOSE4

- Tube Black, smooth, sulfur free EPDM rubber compound with peroxide curing, antistatic $(R < 1M\Omega/m)$
- · Cover Black, smooth EPDM rubber compound
- Reinforcement synthetic textile fabrics
- Temperature range -40°C (-40°F) +100°C(+212°F), with peaks up to
 - +120°C(+248°F) additional durability

Insulated Heat Blanket for Totes



275 gallon insulated heat blanket, protects down to -23°C(-10°F)	Part# DEFTH275BD
330 gallon insulated heat blanket, protects down to -23°C(-10°F)	Part# DEFTH330BD
275 gallon insulated heat blanket, protects down to -34°C(-30°F)	Part# DEFTH275BD-A
330 gallon insulated heat blanket, protects down to -34°C(-30°F)	Part# DEFTH330BD-A



- Uniform, patented heat spreading technology
- Protects BlueDEF® fluid and pump assembly, prevents freezing
- Works on both metal and poly totes
- Unique design allows for easy access to dispensing system
- · UV, wind and water resistant
- Certified to UL/CSA safety standards
- 120V 60Hz and 12V options, 1440 Watts
- Amperage 12A, Resistance 10.0 ohms,
 Ohms Range 9.5 10.5

Pump Bracket for Totes



Stainless steel tote bracket for ½ HP Smart Start Centrifugal pump

Part# DEF700TB-P

Stainless steel tote bracket for Air Diaphragm or 12V pump

Part# DEF700TB-H

Hand Crank Pump



Manually Operated Rotary Hand Pump with Hose and Poly Nozzle

Part# DEFHC10

- Industrial grade polypropylene housing
- Flow rate 6 gpm
- 10' dispensing hose
- · Poly manual nozzle

- Includes 2" bung adaptor
- Should only be used on BlueDEF® drums with plastic valves, DEF001
- Check valve allows fluid to flow through in only 1 direction





Diesel Exhaust Fluid

PERFORMANCE DRIVEN

FOR TECHNICAL AND WARRANTY INFORMATION CALL: 1 (877) 845-ØDEF (Ø333)

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