

Product Information



A PRODUCT OF ASHLAND CONSUMER MARKETS, A COMMERCIAL UNIT OF ASHLAND INC.

Automotive Chemicals - Heavy Duty

Version: 1332/02

Air Shield[®] DEF

Diesel Exhaust Fluid

Valvoline[®] Air Shield[®] diesel exhaust fluid (DEF) is produced by combining highly purified urea with ultra pure demineralised water under clean, controlled conditions. The fluid is stored, shipped and dispensed using dedicated and compatible materials. Batch traceability is assured through rigorous quality control measures.

Valvoline[®] Air Shield[®] diesel exhaust fluid works with all selective catalyst reduction systems (SCR) to significantly reduce nitrogen oxide (NOx) content in diesel engine exhaust streams. SCR is a new exhaust gas after-treatment technology that incorporates aqueous 32.5 % urea based diesel exhaust fluid to meet the latest emissions requirements.

Valvoline[®] Air Shield[®] DEF is safe to handle and store. It is non-toxic and non-polluting. DEF is stable and colorless. It is non hazardous and readily bio-degradeable. DEF begins to freeze at -11.1 degrees C and has a 7% volume expansion on freezing. DEF storage should avoid freezing. DEF is freeze / thaw stable. DEF weighs approximately 1.08 Kg per Litre.

The shelf life of DEF varies with storage temperature. At temperatures under 25 C, DEF is shelf stable for two years. At temperatures of 27 to 32 C, DEF has a one year shelf life. Valvoline recommends DEF be stored in a cool dry, well ventilated area not in direct sunlight. The optimum storage temperature is up to 25 degrees C and temperature should be controlled.

Valvoline[®] Air Shield[®] DEF packages carry a date code. This allows for product age determination.

If DEF is spilled on your vehicle, rinse with water. If it dries, white crystals may be observed. These can be easily washed away with water. DEF has a faint ammonia smell and is harmless. DEF is corrosive to copper, brass, mild steels and galvanized materials. Always use compatible containers for DEF including HDPE, high density polyethylene and stainless steel. Benecor pumps are suggested by Valvoline.

<i>Performance Levels/Approvals</i>
ISO 22241-1 Quality
AUS32 - DEF
DIN70070

Valvoline [®] Air Shield [®] DEF Typical Physical Properties		
Urea	mass %	32.5
Biuret	mass %	0.3 max
Water	mass %	67.5 typical
Flash Point	°F/°C	250/121
Weight per gallon approximate	lbs	9
Density @ 20C	kg/M3	1089.7 typ

*Suitable for use where AdBlue is recommended

Application

DEF consumption is approximately 2-3% of fuel use but varies with duty cycle, operation, geography and other factors.

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Health and Safety

This product is not likely to present any significant health or safety hazards when used correctly in the right application. A Material and Safety Data Sheet (MSDS) is available on request via your local sales office or 1800 804 658 or through our website www.valvoline.com.au

Protect the Environment

Take used oil to an authorized collection point. Do not discharge into drains, soil or water.

Typical Properties

Typical property characteristics are based on current production. Whilst future production will conform to Valvoline™ specifications, variations in these characteristics may occur.

ISO 22241-1 Quality Characteristics		
Valvoline® Air Shield® diesel exhaust fluid		
Characteristic	Unit	Typical
Refractive Index	-	1.383
Alkalinity as NH ₃	%(m/m)	0.06
Phosphate	mg/kg	0.06
Insoluble Matter	mg/kg	2.1
Aldehydes	mg/kg	0
Calcium	mg/kg	<0.1
Iron	mg/kg	<0.1
Copper	mg/kg	<0.1
Zinc	mg/kg	<0.1
Chromium	mg/kg	<0.1
Nickel	mg/kg	<0.1
Aluminum	mg/kg	<0.1
Magnesium	mg/kg	<0.1
Sodium	mg/kg	<0.1
Potassium	mg/kg	<0.1

This information only applies to products manufactured in the following location(s): Australia

Part Number	Pack Size
1332.10	10L
1332.51	205L
1332IBC	IBC

People Who Know, Use Valvoline™

Serving more than 100 countries around the globe, Valvoline is a leading marketer, distributor and producer of quality branded automotive and industrial products and services. Products include automotive lubricants including MaxLife™, the first motor oil specifically formulated for higher-mileage vehicles; transmission fluids; gear oils; hydraulic lubricants; automotive chemicals; specialty products; greases, and cooling system products.

For more information on Valvoline products, programs and services please visit www.valvoline.com.au or contact the Technical Hotline on 1800 804 658

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EPK – Effective 1-04-2013

Replaces – 1332/01