

Technical Data Sheet

Shell Diesel Extra

Automotive Diesel Fuel

Description

Diesel Extra is a special purpose light distillate fuel for use in high speed diesel engines (i.e. those operating at greater than 800 rpm), in services involving frequent and relatively wide variations in loads and speeds. It is used in private automotive vehicles, commercial fleets (on and off road), marine and industrial applications.

Performance Features

- Diesel Extra is formulated to deliver adequate lubricity, to help protect fuel pumps and injectors from
 excessive wear. The cloud point is controlled on a regional and seasonal basis for the purposes of
 delivering operability across Australia. Shell Diesel Extra is an Ultra Low Sulphur Diesel fuel. The sulphur
 content is controlled to less than 10 mg/kg
- Shell Diesel Extra specification meets and exceeds the US ASTM D975 specification and is equivalent to the European EN590 diesel specification

Applications

- Diesel Extra is an Ultra Low Sulphur Diesel fuel designed for modern high-speed compression ignition
 engines. The diesel meets all the requirements of the Australian Fuel Quality Standards Act 2000 and
 has a maximum sulphur content of 10 ppm. This fuel is especially suitable for use in all heavy duty
 engines
- It has been formulated to help clean injector systems (better fuel economy, more torque, less emissions), provide corrosion protection and contains an anti-foam agent to allow faster fuelling

Health, Safety and Environment

Guidance on health and safety is available on the appropriate Safety Data Sheet which can be obtained from the Viva Energy Technical Help Desk or from www.vivaenergy.com.au

Storage

- Drums of fuel should be stored in an upright position under cover protected from rain and direct sunlight, or with drum top covers to prevent ingress of water. Ensure buildings are well ventilated.
- Product in unopened drums should be acceptable for use in a 24 month period. Product stored for longer than 24 months or in containers that have been opened should be checked to verify freedom from water, contamination or degradation.



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Specifications / Approvals / Recommendations

Shell Diesel Extra is manufactured to meet the specifications of:

- Australian Fuel Quality Standards Act 2000
- Fuel Standard (Diesel) Determination 2019
- AS 3570 -1998 for Cold Flow Properties

Typical Physical Characteristics			
Properties	Units	Methods	Diesel Extra Typical
Density@ 15°C	kg/m3	ASTM D1298 / D4052	840 (820-850 max)
Viscosity @ 40°C	mm2/s	ASTM D445	2.0-4.5
Flash Point	°C	ASTM D93	70 (61.5 min)
Sulphur	mg/kg	ASTM D2622/D5453	10 max
Cetane Index	-	ASTM D4737	49 (46min)
Distillation - 95%	°C		360 max
Water	mg/kg	ASTM D6304	70 (200 max)
Ash	% mass	ASTM D482	0.02 (0.1 max)
Sediment	% mass	ASTM D473	0.002 (0.01 max)
Filterability Test	-	IP 387	1.01 (2.0 max)
Strong Acid Number	mg KOH/g	ASTM D664/D974	Nil
Total Acid Number	mg KOH/g	ASTM D664/D974	<0.1 (2.5max)
Copper Corrosion	-	ASTM D130	1a
Lubricity (HFRR test)	μm	IP 450	400 (460 max)
Conductivity	pS/m	ASTM D2624	100 (50 min)
FAME Content	%v/v	EN14078 or declaration	0 (5.0 max)

Technical Help Desk		
Phone	1300 134 205	
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