

Diesel 10

Automotive Diesel Fuel

Description

Diesel 10 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 10 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 10 is an Ultra Low Sulphur Diesel fuel. The sulphur content is controlled to less than 10 mg/kg
- Shell Diesel 10 specification meets and exceeds the US ASTM D975 specification and is equivalent to the European EN590 diesel specification.

Applications

- Diesel 10 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 suitable for use in modern engines that are fitted with Euro 5/6 or V/VI emission control systems.

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.

Specifications / Approvals / Recommendations

Viva Energy Diesel 10 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 10 Typical |
|-----------------------|--------------------|------------------------|-------------------|
| Density@ 15°C | kg/m ³ | ASTM D1298 / D4052 | 840 (820-850 max) |
| Viscosity @ 40°C | mm ² /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

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|--------------|--|
| Phone | 1300 134 205 |
| Email | technicalhelpdesk@vivaenergy.com.au |