

FUEL APPEARANCES

1. BP PETROL

BP Petrol is blended from the volatile products of crude oil distillation and the cracking and reforming of residual products in the refinery. The main properties of volatility and octane are modified to meet engine manufacturer's requirements for use in spark ignition engines.

2. APPLICATION

Within Australia BP petrol is sold from the terminal and retail sites to customers who use them for the following applications that use spark ignition engines:

- Cars, trucks, tractors, bikes for on and off road use
- Portable generators and stationery equipment

With the addition of two stroke oils in the required ratio BP petrol can be used in two stroke spark ignition engines that power lawn mowers, brush cutters, chain saws and outboard motors.

3. APPEARANCE OF FUEL

The appearance should always be

- Clear and bright
- No Suspended Dirt
- No Suspended Water (0.05%)
- Haze Rating 1 (Diesel)



4. FUEL COLOURS

Fuel colors may vary depending on the type of crude oil used, for example the lighter the crude the lighter the fuel color and the heavier the crude the darker the color.

Premium fuels are naturally yellow in color

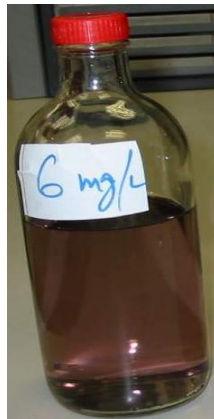
Regular fuel is dyed and the reason for this is to be able to distinguish between regular and premium grade fuels.

Ultimate Unleaded	-	Yellow
Premium Unleaded	-	Yellow
Regular Unleaded	-	Purple / Bronze
Regular Unleaded 10% Ethanol	-	Purple / Bronze
Diesel	-	Yellow / Blue / Water White

PREMIUM



REGULAR



DIESEL



2 STROKE MIX



FUEL CLEANINESS

By the time fuel is produced and reaches a seaboard storage terminal the typical level of cleanliness is:

- Water - as dissolved water 0.01% wt by ASTM D1744
- Water and sediment – 0.01% vol by ASTM D2709, the specification is 0.05% vol max
- Particulate matter – up to 3 mg/l by ASTM D2276, which filters diesel through a 0.45 micron filter.

From the terminal tank to the vehicles tank the potential sources of contamination are:

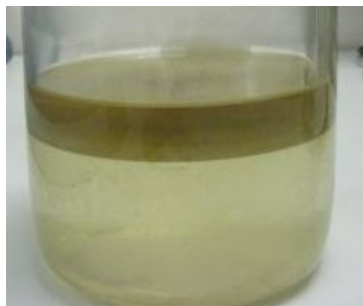
Dust – from the environment through storage tank breathers and engine fuel tank breathers.

Water – from condensation of water vapour entering through storage tank breathers.

Water and dirt – from fungal and bacterial activity due to fungus living in condensed water in the fuel tank.

Rust – from the internal walls of storage tanks.

Picture of water in petrol



Picture of water in Diesel



Water will always be the bottom layer in hydrocarbon fuel and water mixtures.

Picture of Hazy Diesel v's Non Hazy



The Effect of Hazy diesel.

Diesel haze normally contains suspended water particles, which may result in fuel pump failure and possible injector failure, as diesel fuel lubricates the fuel system and with the presence of water the lubrication is reduced.

HAZY FUEL SHOULD NOT BE USED.

**For further information, please call the
BP Lubricants and Fuels Technical Helpline
1300 139 700
freecall**

