Information Sheet
Treatment of Fungus in Diesel Fuel

What is Diesel Fungus?

Diesel fungus describes a number of living organisms that can be found in diesel fuel. They are either fungal or bacterial but both cause similar problems in affected fuel.

What Causes Diesel Fungus?

Diesel fungus is caused when moisture or water comes into contact with diesel. There are a number of ways that this can happen the most common ways being:

- Incorrect handling and storage procedures
- Tanks without adequate seals.
- Diesel left standing for long periods of time allowing moisture to gradually build up
- Diesel stored in tanks that are not full. This can be a particular problem in hot humid areas where the tanks "breathe" causing condensation.

What Problems can Diesel Fungus Cause?

- Natural by-products especially organic acids which make the fuel unstable
- Blocked fuel filters
- Reduced power output
- Increased fuel usage.
- Damage to the fuel system

Does Bitron Kill Diesel Fungus?

Bitron D110 Diesel Fuel Treatment contains a fungicide which is designed to kill most diesel fungus and bacteria. The product can be used as both a maintenance dose to keep diesel bug at bay in unaffected tanks or as a "kill" dose in tanks already affected with diesel bug. The amount of product required and treatment procedure varies depending on whether the tank is unaffected or affected by the bug.

What is a Maintenance Dose?

Bitron D110 is effective in keeping stored diesel fungus free. An initial maintenance dose of 3 ml/Litre should be added to a full tank of diesel. **It is important that the tank has not already been infected with diesel fungus otherwise a kill dose should be used instead.** Each time the tank is refilled or topped up, **Bitron D110** should be added at a ratio of 2 ml/Litre of the top up volume.

How do I get rid of Diesel Bug?

If the tank is already infected then the following steps should be followed:

- If there is only a small amount of stored diesel in the storage tank it is often better to empty the tank entirely and thoroughly clean the tank. DISPOSE of the waste diesel as pumping back in will re-infect the tank.
- If disposing of the contents of the tank is not an option then add **Bitron D110** at a ratio of 3ml/Litre of the volume of diesel being treated. Ensure the product is mixed through the diesel then allow to sit for 48hrs. The fuel can then be used but is important to use a filtering device when pumping the diesel out as the dead fungus will fall to the bottom of the tank. When the tank has reached your defined low

point, dispose of the leftover diesel and thoroughly clean the tank before refilling. Continue to treat the diesel at the maintenance level to ensure the fuel does not become infected again.

It is important to note that **Bitron D110** will not help in cases where the diesel is exposed to large amounts of water. Tanks that are heavily infected with bug may require 2 kill doses.

How can I prevent Diesel Bug?

- Use **Bitron D110** regularly in all tanks where diesel is stored
- Ensure tanks are kept full where possible as this reduces the space where moisture can accumulate. Maintaining a tank at half full allows water to build up which in turn promotes diesel fungus and corrosion in the top half of the tank.
- Tank maintenance – ensure tanks are cleaned regularly to remove moisture, dirt and other particles that can collect.
- Do not store fuel beyond its storage time – in the case of diesel no longer than 12months in cooler climates and between 6-12months in warm humid climates.
- Where the facility exists, water should be removed from the tanks weekly.
- Ensure tanks have a well defined low point where water can collect and be drained.

Common Dosage Amounts (Maintenance)

FUEL ADDED (LITRES)	BITRON DOSE (LITRES)
500	1
1,000	2
2,500	5
5,000	10
10,000	20
15,000	30
20,000	40
25,000	50
30,000	60
35,000	70
40,000	80
45,000	90
50,000	100
100,000	200

Common Dosage Amounts (Infected (Kill) Dose)

FUEL ADDED (LITRES)	BITRON DOSE (LITRES)
500	1.5
1,000	3
2,500	7.5
5,000	15
10,000	30
15,000	45
20,000	60
25,000	75
30,000	90
35,000	105
40,000	120
45,000	135
50,000	150
100,000	300