

## CENTRAL HEATING POWERFLUSHING CLEANER F5

- Suitable for use with all known powerflushing machines
- Removes sludge and scale and restores heating efficiency of existing systems
- Removes flux residues and other debris
- Compatible with all metals and materials commonly used in heating systems
- Easy to use, system can be left running normally during cleaning
- pH Neutral, non-hazardous formula



### Product Description

Fernox Powerflushing Cleaner F5 is a quick and effective pH neutral cleaner for central heating systems. It is designed to be used in conjunction with Fernox Powerflow MKIII powerflushing unit (but is compatible with all known makes of powerflushing machines) to remove debris, sludge and scale from existing systems of all ages. In this way, it will restore heating efficiency and eliminate or reduce boiler noise in heavily contaminated systems.

If the system is heavily scaled the use of Fernox DS40 System Cleaner is recommended. Fernox Powerflushing Cleaner F5 is a pH neutral, non-hazardous product that is well inhibited and compatible with all metals and materials commonly used in heating systems.

For continued long term protection the system should be thoroughly cleaned and flushed in accordance with UK legislation BS7593:1992 and Benchmark using Fernox Powerflushing Cleaner F5, before treating with Fernox Protector F1. We recommend Protector levels are checked regularly (annually).

### Physical Properties

Colour:	Amber
Odour:	Faint
Form:	Liquid
pH (conc):	7
pH (1% soln)	7.5 - 7.8
SG:	1.2 g/cm <sup>3</sup> (20°C / 68°F)

### Application and Dosage

One 1 litre container of Powerflushing Cleaner F5 is sufficient to clean an average sized system (100 litres or up to ten single radiators). Additional/repeat applications of Powerflushing Cleaner F5 may be necessary for larger systems, or if systems are heavily sludged.



Fernox Powerflushing Cleaner F5 is designed to be used in conjunction with a powerflushing unit. In this case, please refer to the unit manufacturer's instructions.

When using Powerflushing Cleaner F5 with a powerflushing unit, cleaning should be completed within an hour. Use dynamic flushing with plain water until the water is clear, testing with the TDS meter as above to ensure thorough flushing.

Refill the system adding a suitable Fernox Protector F1 for long term protection against corrosion and limescale.

In single feed indirect cylinders, e.g. "Primatic" or similar, potable water chemicals must be used. First drain and refill the entire system with plain water. For optimum results the entire system, including drop feed radiators, where fitted, should be completely drainable. Preferably full bore gate valves with hose connectors should be provided temporarily for this purpose. Motorised and thermostatically controlled valves must be set so that no part of the system is closed off during cleaning or rinsing. Discharges must be made to the foul drain and not the surface water drain.

For open vented systems add Fernox Powerflushing Cleaner F5 via the header tank. For sealed systems add via a radiator using a Fernox Injector

When cleaning existing systems, sludge and debris should be dispersed for at least one hour at normal operating temperatures. However, to remove hardened iron oxides and limescale, the cleaning time can be extended to up to one week under the normal heating cycle. If a radiator still has a cold spot after one hour, increase the flow through the radiator by closing the valves on the other radiators. An additional or repeat dose of Powerflushing Cleaner F5 may be necessary in some cases.

Drain and flush the system thoroughly to remove the cleaning chemical and debris. At least three complete changes of water are likely to be required. This is a crucial part of the cleaning process and must be carried out correctly. Use a rinse test meter such as the Fernox TDS meter to ensure that the Total Dissolved Solids have been satisfactorily removed. The system can be regarded as being thoroughly flushed when the system water value is within 10% of the mains water value. Differences over 10% mean that significant cleaner residues have been left in the system and further flushing is required. If not removed, cleaner residues will promote corrosion and negate the cleaning process.

### **Packaging, Handling and Storage**

Fernox Powerflushing Cleaner F5 is supplied in 1 litre bottles.

Fernox Powerflushing Cleaner F5 is classified as non-hazardous. But as with all chemicals: Keep out of reach of children. In case of contact with skin or eyes, rinse immediately with plenty of water. Wear suitable gloves