

CLEANER F3

- Cleaner for pre-commissioning new systems in accordance with BS 7593:2019
- Removes sludge, limescale and other debris to restore heating efficiency of existing systems
- When used in conjunction with Protector F1 gas savings of up to 15% can be achieved every time you heat your room*
- Compatible with all metals and materials commonly used in heating systems
- Easy to use, system can be left running normally during cleaning
- Suitable for use with all known powerflushing machines
- pH Neutral, non-hazardous



Product Description

Fernox Cleaner F3 is a quick and effective pH neutral cleaner for central heating systems. It is designed to remove debris, sludge and scale from existing systems. In this way, it will restore heating efficiency and eliminate or reduce boiler noise. It has also been designed for pre-commission cleaning of new installations in accordance with BS 7593:2019, removing flux residues and other debris, thereby helping extend the life of a system.

For older sludged systems, Cleaner F3 is particularly effective when used in conjunction with a powerflushing unit. If the system is heavily sludged, repeat applications of Cleaner F3 or the use of Fernox Cleaner F5 may be required. If the system is heavily scaled the use of Fernox DS40 System Cleaner is recommended. Cleaner F3 is a 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 BS 7593:2019 and Benchmark using Fernox Cleaner F3, before treating with Fernox Protector F1. We recommend Protector levels are checked regularly (annually).

'Cleaning a central heating system using Fernox F3 Cleaner, and protect with Fernox F1 Protector can restore and maintain system efficiency resulting in a **gas saving of up to 15%** every time you heat your room. This saving is equivalent to 110 Kg CO₂e per typical home per year.'

Physical Properties

Colour:	Brown
Odour:	Aromatic
Form:	Liquid
pH (conc):	6.4
pH (0.5% soln)	6.5 - 7.7
SG:	1.17 @ 20°C

Application and Dosage

One 500 ml bottle of Cleaner F3 is sufficient to clean a large domestic central heating system (130 litres). Additional/ repeat applications of Cleaner F3 may be necessary for larger systems, or if systems are heavily sludged. Alternatively, Power Cleaner F8 may be used for heavily sludged systems. 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 cleansing or rinsing. Discharges must be made to the foul drain and not the surface water drain.

For open vented systems add Cleaner F3 via the header tank. For sealed systems add via a suitable dosing point or use Fernox Cleaner F3 Express 400ml. Fernox Cleaner F3 can also be used in conjunction with a powerflushing unit. In this case, please refer to the unit manufacturer's instructions.

When pre-commission cleansing new systems, Fernox Cleaner F3 should be circulated for a minimum of one hour at normal operating temperature. For cleaning existing systems, sludge and debris should be dispersed also within 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 Cleaner F3 may be necessary in some cases.

Drain and flush thoroughly, at least twice, until the water runs clear. When using Cleaner F3 with a powerflushing machine, cleaning should be completed within an hour. Use dynamic flushing with plain water until the water is clear.

Refill the system adding 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.

**independently verified.*