

FERNOX

MAKES WATER WORK

DS-40 DESCALER AND CLEANSER

- Powerful descaler and sludge remover for cleansing domestic central heating systems
- Eliminates boiler noise
- Compatible with all metals and materials commonly used in central heating systems
- Restores heating efficiency
- Reduces fuel wastage
- Complete pack including neutralising agent
- Leaves metals surfaces clean



Product Uses

Fernox DS-40 is a powerful descaler and sludge remover for cleansing domestic central heating systems and eliminating boiler noise. DS-40 is only recommended for whole system cleansing where the system is known to be sound. If there has been a history of leaks, or weaknesses are suspected, usually on older installations, Fernox Heavy Duty Restorer (Superfloc) should be used.

Separate boiler de-scaling with DS-40 can be carried out safely on systems of any age following whole system cleansing with Heavy Duty Restorer (Superfloc). Fernox DS-40 will dissolve oxide sludge and limescale to leave metal surfaces completely clean. Use of neutraliser sachet provided in the pack ensures that the system is fully conditioned prior to the addition of a suitable Fernox Central Heating Protector.

Fernox DS-40 is well inhibited and compatible with all metals and other materials commonly used in central heating systems, including aluminium. Fernox DS-40 is also suitable for use with all know acid resistant makes of powerflushing unit.

The procedures outlined on this sheet can all be carried out with the boiler and radiators in situ. The boiler is needed during cleansing operations.

Physical Properties

Fernox DS-40 is a blend of food grade organic acids with inhibitors and surfactants.

Colour: Off white/cream
Odour: Slight fish
Form: Crystals. Powder
pH: 2 at 2% w/w in water
SG: n/a

Application and Dosage

Preparing the system

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. Check that the overflow pipe from the feed and expansion tank (open vented systems) does not discharge into the cold water storage tank, or onto any surface which could be stained by the cleansing agent. Where appropriate, a hose should be fitted temporarily to the overflow pipe and lead to a suitable drain.

To carry out separate boiler de-scaling, create a restricted circuit by isolating flow and return pipes to the heating circuit, or by closing the lockshield and wheelhead valves to all radiators. The cold feed and open vent pipes must be retained in circuit at all times. Sealed systems must be fitted with automatic air vents (AAV's) at all high points and should be equipped with isolating valves to prevent spillage if seizure of the venting device occurs.

Instructions for use

One 2 kg container of Fernox DS-40 is sufficient to de-scale a whole system of 5-10 radiators, i.e. 50-100 litres water capacity (2-4%). Repeat doses of DS-40 may be applied where necessary to completely restore system efficiency or eliminate boiler noise.

When de-scaling the entire system, frequent venting of all radiators is necessary to ensure satisfactory circulation is maintained. Initially, drain and flush the entire system with plain water. Dissolve Fernox DS-40 crystals in a bucket of hot water and introduce to the system via the central heating feed and expansion tank, or via a radiator using a Fernox Injector. During system de-scaling DS-40 should be circulated for about 7 days under normal operating conditions (maximum of 4 hours if aluminium components are fitted). When separately de-scaling boilers, DS-40 should be circulated hot (restricted circuit see "Preparing the system") for 24 hours.

Now, completely drain and flush the system with cold water. Flushing is defined as the process of filling and then emptying the entire system. Refill the system, adding the entire contents of the neutraliser sachet(s) provided. Circulate hot for about 2 hours. Finally, drain and flush the system until water runs clear. At least three complete changes of water are likely to be required.

To protect the system from further corrosion or scale-build up, add Fernox Central Heating Protector on re-filling the system.

Packaging, Handling and Storage

Fernox DS-40 is supplied in 2kg tubs.

DS-40 is based on food-grade material and is classified as non-hazardous. Wear suitable gloves. Splashes in eyes and prolonged contact with the skin should be avoided and in both cases must be washed off immediately with plenty of fresh water.

DS-40 Neutraliser is classified as harmful. Harmful if swallowed. Irritating to eyes. Keep out of reach of children. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear suitable gloves. If swallowed seek medical advice immediately and show this container or label.