

## PROTECTOR F1

- Protects against corrosion and scale in mixed metal central heating systems
- Best-in-class pH buffering for optimum system pH control
- When used in conjunction with Cleaner F3 gas savings of up to 15% can be achieved every time you heat your room
- Stops frequent venting of radiators
- Prevents sticking pumps and boiler noise
- Reduces maintenance costs and saves on fuel bills
- Prevents cold spots in radiators
- Non toxic



### Product Uses

Fernox Protector F1 gives long-term protection of domestic central heating systems against internal corrosion and limescale formation. It is suitable for all types of boiler, radiators and pipe work systems. Protector F1 is compatible with all metals and materials commonly used in central heating systems. It is suitable for use with all types of water, including softened water and deionised water.

Protector F1 has been formulated to have best-in-class pH buffering ability, which keeps system water pH between 6.5-8.5, giving optimum protection for mixed metal systems.

To comply with BS 7593:2019, Protector F1 levels should be checked annually. The concentration of the product can be easily measured on site using a Fernox Protector Test Kit or by using the Fernox Water Quality Test postal service.

BS 7593:2019 also states that after 5 years, systems should either be re-dosed or a laboratory test performed, such as the Fernox Water Quality Test.

***If you protect a central heating system using Fernox Protector F1, after cleaning with Fernox Cleaner F3, you 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 CO<sub>2</sub>e per typical home per year.***

### Physical Properties

Protector F1 is a blend of inorganic and organic corrosion and scale inhibitors.

Form:	Liquid
Odour:	Aromatic (slight)
Colour:	Light Yellow
pH (conc.):	8.3
pH (soln.):	7.8 to 8.5
SG:	1.135 at 20°C



## **Application and Dosage**

The recommended 'in use' concentration of the product is 0.385%. One 500ml bottle will treat a large domestic system (130 litres). For open vented systems add via the feed and expansion tank. For sealed systems add via a suitable dosing point (e.g. a towel rail or an in-line system filter). Alternatively, use a suitable dosing vessel to inject the product into the system.

In single feed indirect cylinders, e.g. "Primatic" or similar, potable water chemicals must be used.

We recommend untreated or sludged systems are thoroughly cleaned and flushed in accordance with BS 7593:2019 and Benchmark using Fernox Cleaner F3/ F8, before treating with Fernox Protector F1, as existing debris can damage the installation.