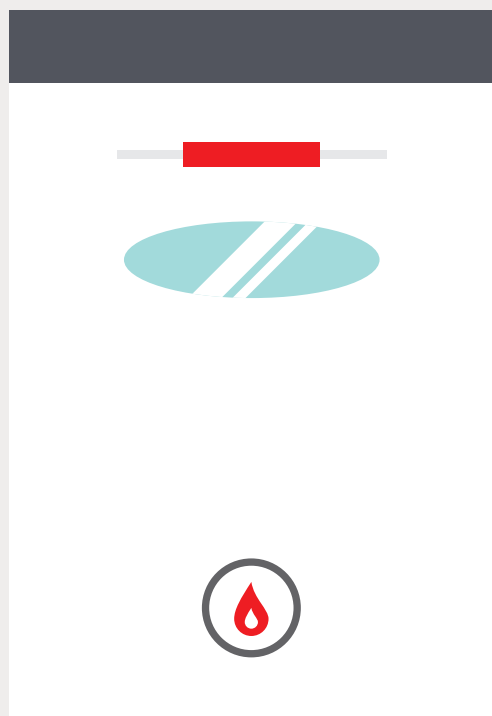




# Common central heating problems



# Common central heating problems

This guide explains some of the common issues seen in domestic central heating systems, and more importantly, shows how to fix and prevent them using high quality products and the best practice water treatment process of **Clean, Protect and Maintain.**



**Clean**

**Protect**

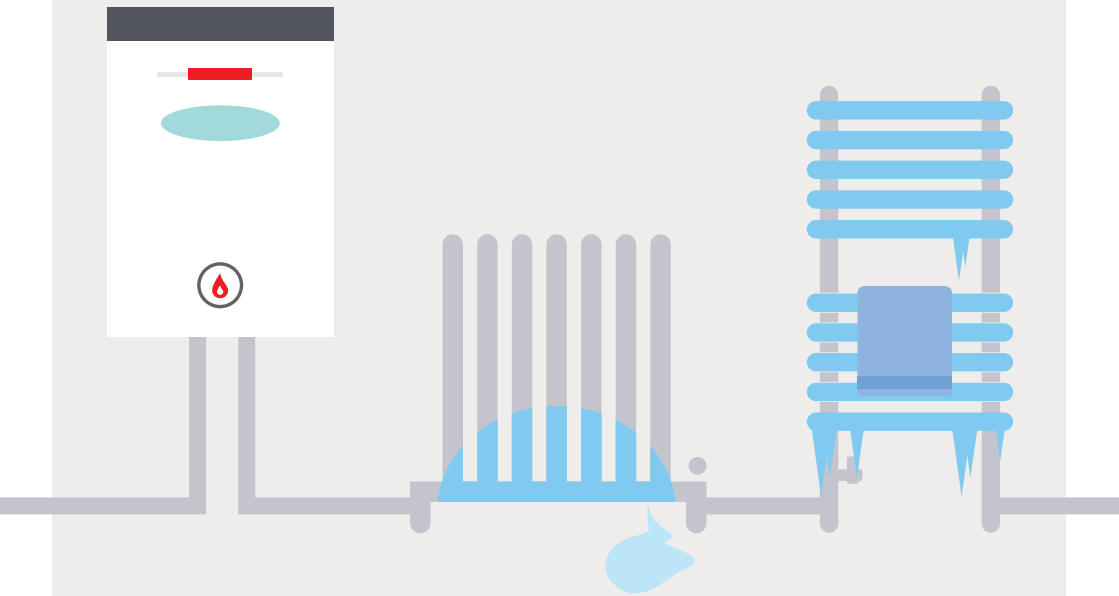
**Maintain**

# Contents

Poor system circulation .....	<b>04</b>
System noise .....	<b>06</b>
Boiler pump failure.....	<b>08</b>
Radiator cold spots: bottom.....	<b>10</b>
Radiator cold spots: top.....	<b>12</b>
Frozen pipes .....	<b>14</b>
Leaking pipes .....	<b>16</b>
Underfloor heating.....	<b>18</b>
General energy wastage .....	<b>20</b>
Any questions?.....	<b>22</b>



# Poor system circulation



## Common cause

Sludge in the radiators:  
a product of corrosion.

## Fix it:

Remove sludge by **cleaning the system**, preferably by **powerflushing** with an appropriate **cleaner**.



**X800**  
Fast Acting Cleaner



**JetFlush Rapid®**  
Powerflushing unit

## Stop it happening again:

Treat the clean system with **X100 Inhibitor** and install an **Eliminator Vortex** system filter to protect against future sludge build up in the radiators.

To ensure protection is maintained, check inhibitor levels annually with **X100 Quick Test**.



**X100**  
Inhibitor

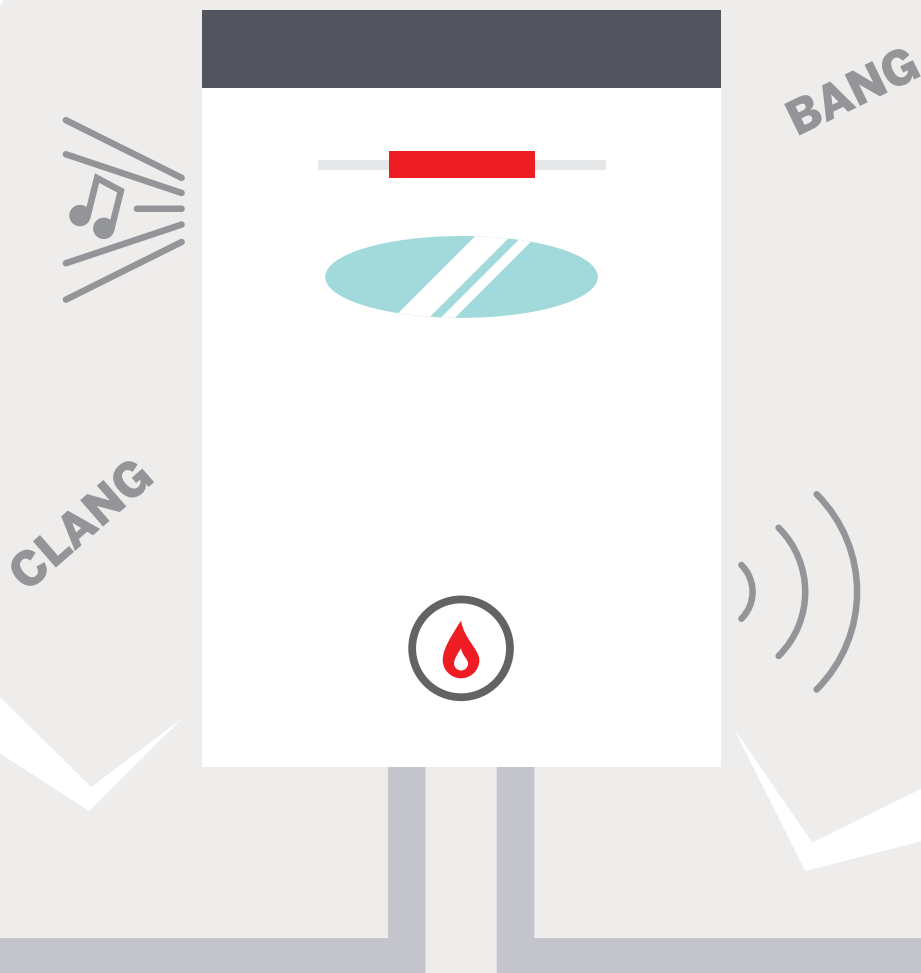


**Eliminator Vortex300**  
system filter



**X100**  
Quick Test

# System noise



## Common cause

Limescale deposits on the heat exchanger of the boiler.

## Fix it:

Add **Sentinel X200 Noise Reducer** for a quick and easy solution.



**X200**  
Noise Reducer

## If it persists:

Clean the system with **Sentinel CalSanit** to remove deposits, preferably by powerflushing.



**CalSanit**  
Descaler



**JetFlush Rapid®**  
Powerflushing unit

## Stop it happening again:

Treat the clean system with **X100 Inhibitor** to prevent future build up of limescale.

To ensure protection is maintained, check inhibitor levels annually with **X100 Quick Test**.

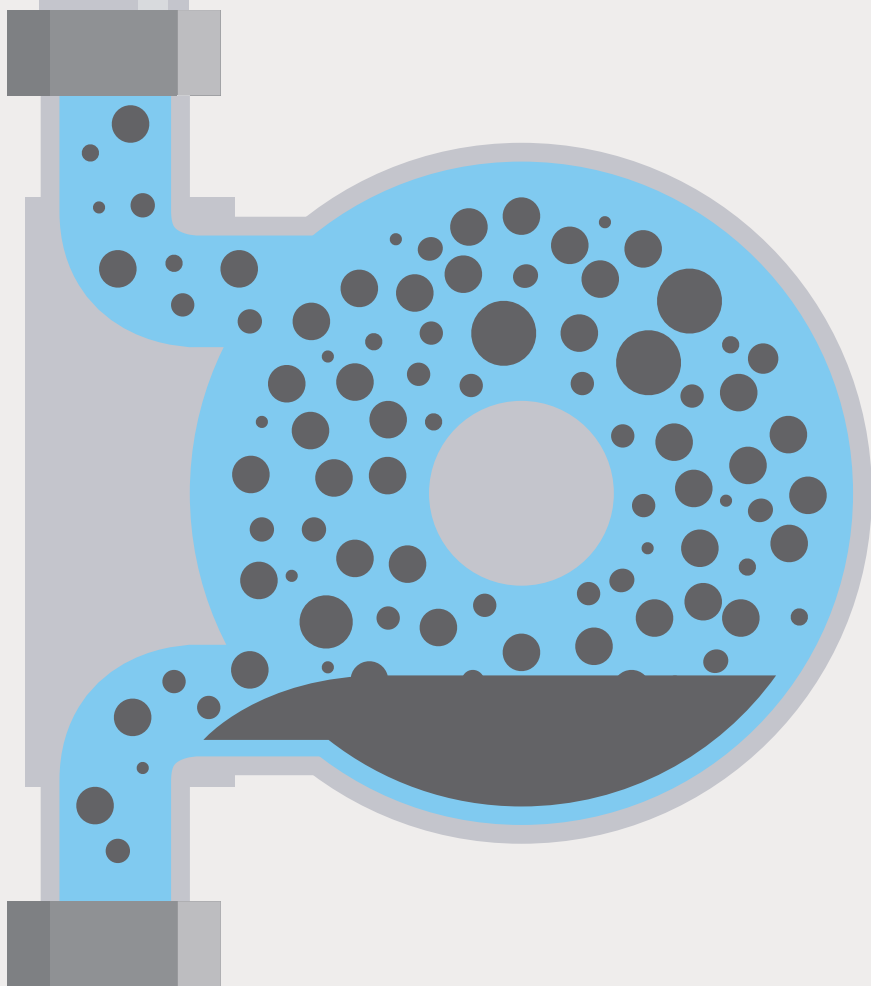


**X100**  
Inhibitor



**X100**  
Quick Test

# Boiler pump failure



## Common cause

Magnetite sludge from corrosion can collect in components such as pumps, leading to blockages and breakdowns.



## Stop it happening again:

Prevention is best here, so protect all clean systems with **X100 Inhibitor**.

If you suspect that there may already be debris in the system, clean it using an appropriate **cleaner** beforehand.

To ensure protection is maintained, check inhibitor levels annually with **X100 Quick Test**.

Installing an **Eliminator Vortex** system filter will protect against future corrosion build up.



**X800**  
Fast Acting Cleaner



**X100**  
Inhibitor

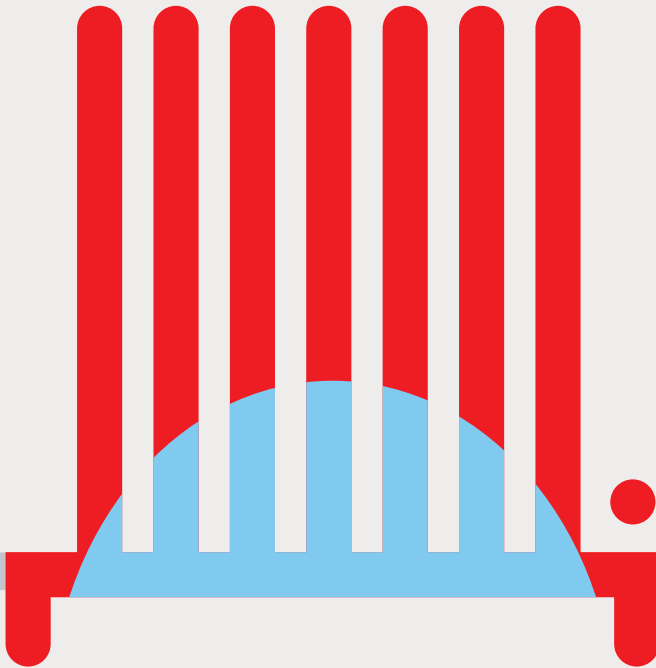


**Eliminator Vortex300**  
system filter



**X100**  
Quick Test

# Radiator cold spots: bottom



## **Common cause**

Magnetite sludge from corrosion restricts water flow by settling at the bottom of the radiator.

## Fix it:

**Clean the system** to remove this built-up sludge.



**X400**  
Rapid-Dose®



**X400**  
High Performance Cleaner

## Stop it happening again:

Treat the clean system with **X100 Inhibitor** and install an **Eliminator Vortex** system filter to protect against future sludge build up in the radiators.

To ensure protection is maintained, check inhibitor levels annually with **X100 Quick Test**.



**X100**  
Inhibitor

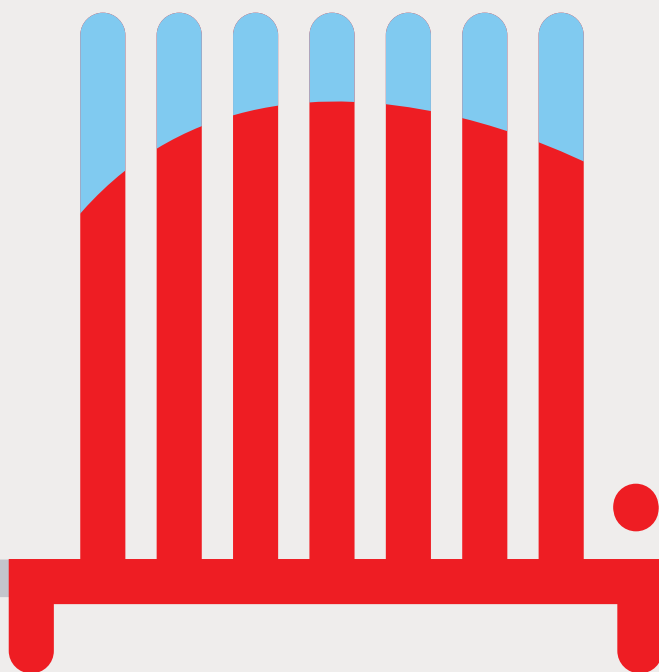


**Eliminator Vortex300**  
System Filter



**X100**  
Quick Test

# Radiator cold spots: top

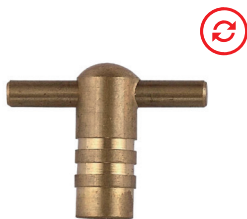


## **Common cause**

Trapped air or hydrogen gas from corrosion prevents water from circulating effectively to the top of radiators.

## Fix it:

**Bleed radiator** to remove air or gasses from system.



**Radiator**  
Bleed Key

## Stop it happening again:

Air in systems is a sign that water has been lost and therefore the level of inhibitor has been diluted; ensure protection by topping up inhibitor using **Sentinel X100 Inhibitor Rapid-Dose®**.

To ensure protection is maintained, check inhibitor levels annually with **X100 Quick Test**.



**X100**  
Rapid-Dose®

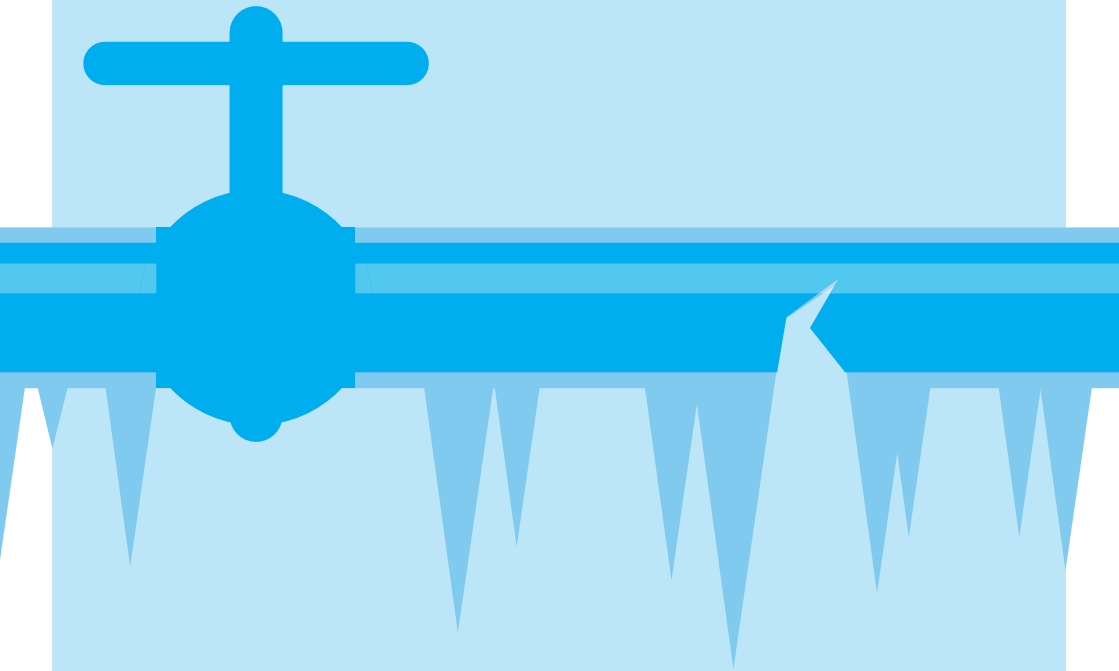


**X100**  
Inhibitor



**X100**  
Quick Test

# Frozen pipes



## **Common cause**

Sub-zero temperatures can result in exposed system pipework freezing and potentially bursting.

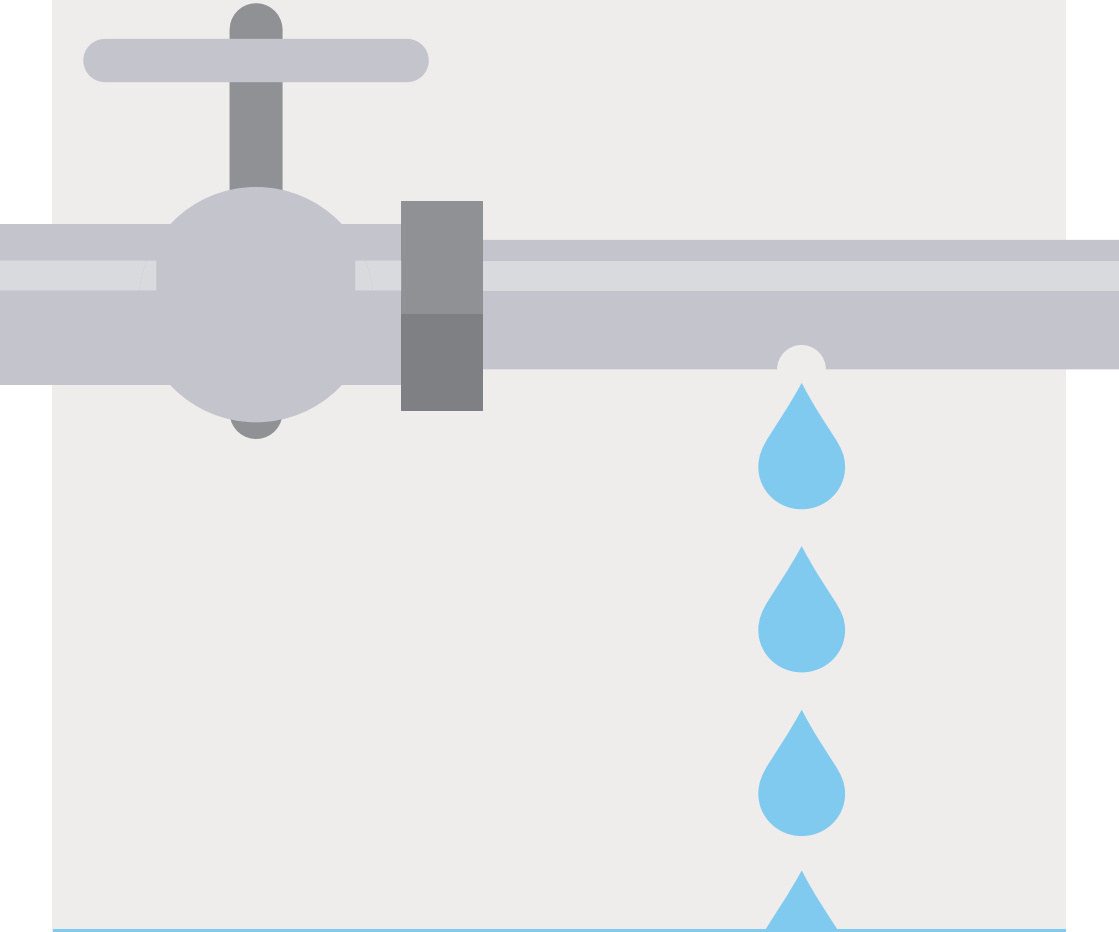
## Stop it happening again:

If the property is exposed to very low temperatures use **X500 Inhibited Antifreeze** to protect against corrosion, limescale build up and freezing.



**X500**  
Inhibited Antifreeze

# Leaking pipes



## Common cause

Corrosion in the system can cause minor perforations (pinholes) in pipes and radiators, causing leaks.



## Fix it:

The solution depends upon the size and severity of the leak. For small, pinhole leaks and weeping joints; add an internal **leak sealer** to the system. This can also be useful where there is a small leak that you cannot find in the system.



**Leak Sealer**  
Rapid-Dose®



**Leak Sealer**  
1 Litre bottle

## Stop it happening again:

Always **clean**, **protect** and **maintain** to prevent the corrosion build up that causes pinhole leaks.



**X800**  
Fast Acting Cleaner



**X100**  
Inhibitor

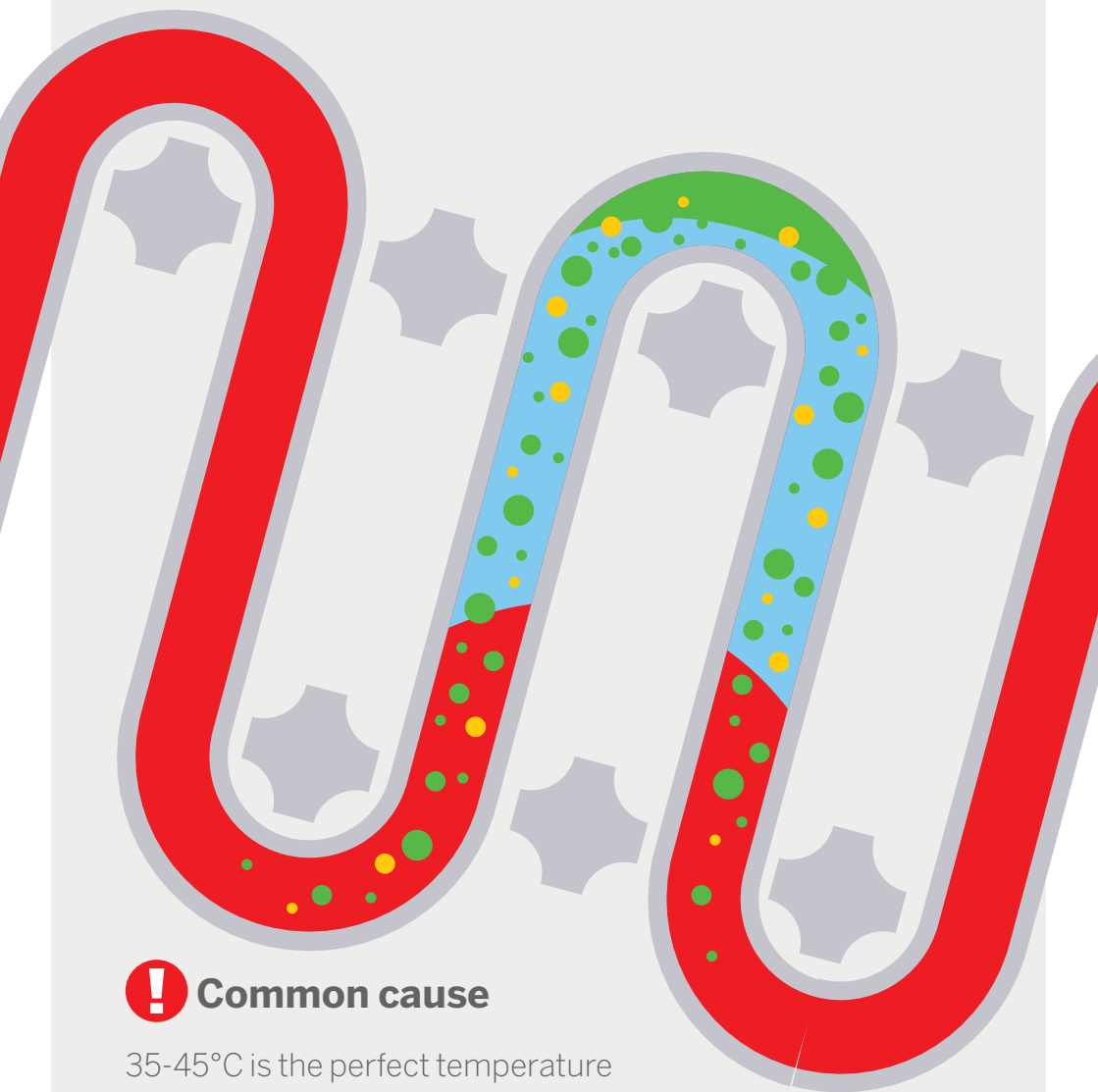


**Eliminator Vortex300**  
system filter



**X100**  
Quick Test

# Underfloor heating: cold spots and smells



## **Common cause**

35-45°C is the perfect temperature for bacterial growth, leaving underfloor heating vulnerable to microbiological problems.

## Fix it:

Clean and protect the system with **Biocide** to clear and cure systems of biological slime.



**X700**  
Rapid-Dose®



**X700**  
Biocide

## Stop it happening again:

Protect the sterile system with another dose of the dual-purpose **Sentinel X700 Biocide** to prevent the problem from recurring.



**X700**  
Rapid-Dose®



**X700**  
Biocide

# General energy wastage



## Common cause

Corrosion and limescale are the most common causes of problems that affect the efficiency and effectiveness of the boiler and heating system.

## Stop it happening again:

Follow The Sentinel System best practice process of **Clean**, **Protect** and **Maintain** to achieve optimum system efficiency for both new and older heating systems.



## Any questions?

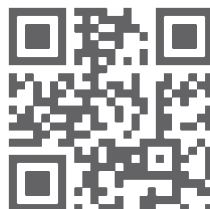
Your local Sentinel expert will be happy to help.

Alternatively, visit our website **[sentinelprotects.com](https://sentinelprotects.com)** to find out more about delivering best practice protection for your heating and hot water system.



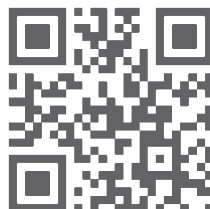
## **My Local Expert**

Find the right person to speak to.



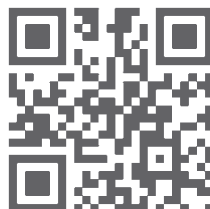
## **Product Selector**

Find the right products for the job.



## **Support Centre**

Get best practice support including 'How To' guides, latest videos and FAQs.





**Sentinel Performance Solutions Ltd**

7650 Daresbury Park,  
Warrington, Cheshire, WA4 4BS,  
United Kingdom.

Tel: +44 (0) 1928 704 330

[www.sentinelprotects.com](http://www.sentinelprotects.com)



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