# **Product Facts**



# Sentinel R600 Thermal Fluid

# Thermal fluid for air source heat pump systems

For enhanced system performance and to provide protection against frost, corrosion and scale, R600 Thermal Fluid should be added to air source heat pump circuits.

Provides optimal freeze protection

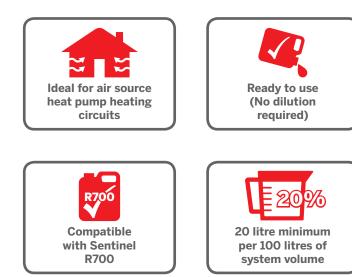
Provides freeze protection of the circuit down to at least -10°C.

 Chemically and thermally stable components

Resists degradation to extend fluid life and thereby reduces cost of system operation.

- Superior corrosion and scale inhibition Prolongs system life and reduces lifetime costs by protecting all metals commonly found in heating circuits from corrosion and deposits.
- Safe to use

Based on propylene glycol; non-toxic and biodegradable.





#### The Sentinel System

Lifetime protection for heating and hot water systems using the best practice process of...



WITH X800 FAST ACTING



PROTECT WITH R700 SANITISER AND BIOCIDE



MAINTAIN WITH FROSTCHECK TEST KIT

# **Application**

Sentinel R600 Thermal Fluid is essential for the thermal efficiency and long-term protection of air source heat pump circuits. The propylene glycol ensures highly efficient heat transfer and freeze protection of the circuit to at least -10°C (or lower depending on dosage level). The unique anti-corrosion formulation contains inhibitors which protects all common system metals against corrosion thereby prolonging lifespan. The product is also especially formulated to prevent fouling of the surfaces of heat exchangers and maintaining thermal performance. Sentinel R600 is compatible with all materials commonly found in a typical air source heat pump circuits.

### Dosing

New systems and those up to 6 months old should be cleaned and flushed with Sentinel X300.

**Existing systems:** Clean with Sentinel X400 or Sentinel X800.

**Sterilising a system:** Ensure the system is protected from bacteria and fungi and their associated problems by the addition of Sentinel R700 Sanitiser and Biocide to the circuit in addition to Sentinel R600.

**Dosing:** The dosage of Sentinel R600 will depend on the level of frost protection required. One 20 litre container of Sentinel R600 and 80 litres of water added to a typical air source heat pump system (100 litres volume) will provide the minimum concentration of corrosion and scale inhibitor and also provide frost protection down to a 'setting point' of approximately -10°C. Two 20 litre containers will provide protection to -30°C. The degree of frost protection achieved by dosing Sentinel R600 can be checked by using the Sentinel FrostCheck Test Kit. It is important that the system equipment manufacturers' instructions be carefully followed when cleaning or filling an air source heat pump system. When the air source heat pump system is filled with Sentinel R600 all the entrained air should be removed before the system is operated.

**Precautions:** Sentinel R600 must not be mixed with other thermal fluids. Ensure that the manufacturer's recommendations state that all the seals and connectors used in the equipment are resistant up to the maximum operating temperature of the thermal fluid.

## **Physical properties**

Appearance:	Clear blue liquid
Specific gravity:	1.04 (20°C)
рН (5%)	6.5 (approx)

### **Safety precautions**

The information provided below enables compliance with the Control of Substances Hazardous to Health Regulations. A full Safety Data Sheet is available upon request.

Description	<b>Thermal fluid for air-source heat pump systems</b> A solution of inorganic and organic corrosion and scale inhibitors in propylene glycol.		
Handling	Avoid contact with skin and eyes. Keep out of reach of children and animals. Wash out empty container thoroughly with water before disposal.		
Storage	Keep container tightly closed. Store in cool well ventilated area.		
Spillage	Flush spillage with plenty of water and wash to waste.		
First aid Skin Exposure:   Eye Exposure: Ingestion:	Skin Exposure:	Wash immediately with plenty of water. If irritation develops, seek medical attention.	
	Eye Exposure:	Flush immediately with plenty of running water. Keep eyelids apart. Seek medical advice.	
	Ingestion:	Rinse mouth with water. Do NOT induce vomiting! Seek medical advice.	
Additional	Not considered hazardous to health. Non-flammable.		

The use of Sentinel water treatment is endorsed by the industry's major international manufacturing companies\*

