

Sentinel R500 Heat Transfer Fluid

Ready to use heat transfer fluid for ground source heat pump systems

To provide exceptional thermal transfer with superior stability and protection against corrosion and deposits as well as resistance to degradation, ground source heat pumps should be filled with R500 Heat Transfer Fluid.

- **Provides optimal freeze protection**

Ready to use with built in freeze protection down to -22°C.

- **Chemically and thermally stable components**

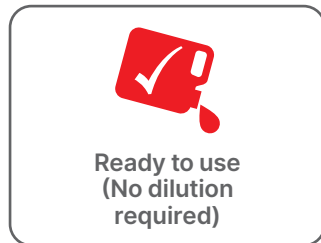
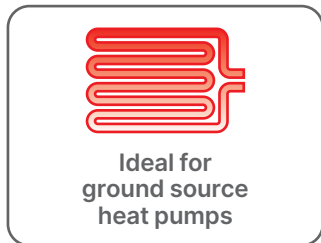
Resists degradation to extend fluid life and thereby reduces cost of system operation.

- **Superior corrosion and scale inhibition**

Prolongs system life by protecting all metals commonly found in heat collector circuits from corrosion and deposits.

- **Safe to use**

Based on propylene glycol; non-toxic and biodegradable.



The Sentinel System

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



CLEAN



PROTECT



MAINTAIN

Application

Sentinel R500 Heat Transfer Fluid is essential for the thermal efficiency and long-term protection of ground source heat pumps. Unlike ethylene glycol based products, R500 contains propylene glycol and is therefore non-toxic. The propylene glycol ensures freeze protection of the circuit even to -22°C . The unique anti-corrosion formulation contains inhibitors which protects all common system metals against corrosion thereby prolonging lifespan. Sentinel R500 is compatible with materials commonly found in a typical ground source heat pump.

Dosing

Sentinel R500 is ready to use. It is important that the system equipment manufacturers' instructions be carefully followed when cleaning or filling a ground source heat pump and ground loop circuit. When the ground source heat pump system is filled with Sentinel R500 all the entrained air must be removed before the system is operated. Sentinel R500 must not be mixed with other heat transfer fluids and must not be diluted with water. Do not top up the system with water, if losses occur the heat transfer fluid in the system must be replenished with Sentinel R500. Sentinel R500 is generally compatible with all materials commonly found in typical ground loop circuits. Ensure that the manufacturers' recommendations state that all the seals and connectors used in equipment are resistant up to the maximum operating temperature of the heat transfer fluid.

Physical properties

Appearance	Blue, aqueous solution
Relative density	1.03 (20°C)
pH	8.5 (20°C)
Frost protection	-22°C

Safety information

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	Heat transfer fluid for ground source heat pump circuits An aqueous solution of propylene glycol containing corrosion and scale inhibitors
Handling	Ensure good ventilation of the work station. Wear personal protective equipment. Avoid contact with skin and eyes. Keep out of reach of children and animals. Wash out empty container thoroughly with water before disposal.
Storage	Store in a well-ventilated place. Keep cool. Store in original container. Keep container closed when not in use.
Spillage	Take up liquid spill into absorbent material. Dispose of materials or solid residues at an authorized site.
First aid	Inhalation: Remove person to fresh air and keep comfortable for breathing. Skin Exposure: Remove/take off immediately all contaminated clothing. Gently wash with plenty of soap and water. Eye Exposure: Rinse immediately with plenty of running water, also under the eyelids. Remove contact lenses if present and easy to do so. Continue rinsing. Ingestion: Do NOT induce vomiting. Rinse mouth. Call a poison center or a doctor if you feel unwell.
Additional	Not considered hazardous to health. Non-flammable.

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



Sentinel Performance Solutions Ltd.

7650 Daresbury Park, Warrington, Cheshire, WA4 4BS, United Kingdom. Tel: +44 (0) 1928 704 330

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www.sentinelprotects.com

