



Product Reference Guide:

Heat Transfer Fluids

blendedfluids
by **blended**™

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Specialty Fluids for Heating and Cooling

Specialty Fluids

Blended Fluids offers a comprehensive range of high-performance heat transfer fluids suitable for diverse applications requiring glycol-blended heating and cooling liquids. Our glycol-based Thermablend range is supplemented by our Serviceblend range of maintenance chemicals.

Our specially formulated heat transfer fluids are available in neat form or pre-blended (IND or MPG) to meet specific requirements, providing an efficient solution for applications with lower energy costs. Thermal Xcellence, a non-hazardous glycol-blend heat transfer fluid containing top-tier multi-metal corrosion and scale inhibitors to prevent internal corrosion and scaling, minimising downtime.

Blended Fluids Team

Our values as a team are built around the needs of our customers with a focus on ensuring that we always deliver the highest standards in the quality of our products and the service we provide.

Our job is to deliver solutions, solve problems and use our expertise to support your business, whether it's resolving a critical issue or drawing on our product knowledge and innovation to solve complex challenges.

Together we are blended.

thermablend

Fluids for Heat Pumps & Solar Thermal

Thermablend, for use in applications which include ground or air source heat pumps, solar thermal systems and underfloor heating.

What is Available?

- **Thermablend IND** (Ethylene Glycol)
- **Thermablend MPG** (Propylene Glycol)
- **Thermablend TX** (Non-hazardous)
- Available preblended with Serviceblend PUR (deionised water) or neat
- Multiple colour options

Product Sizes

- 1000 ltr
- 220 ltr
- 25 ltr
- 10 ltr



thermablend-TX

Description

Thermablend-TX is a multi-application heat transfer fluid. Its low parasitic pumping load results in reduced operational costs, and its additives remain highly stable over a broad temperature range for optimum performance. Thermablend-TX is non-hazardous and biodegradable.

Dilution & Freeze point

Volume %	Freeze Point °C	Refractive Index
50%	-37.8	1.3850
40%	-25.1	1.3744
35%	-19.6	1.3695
30%	-14.9	1.3632
25%	-13.3	1.3602

High Thermal Conductivity

0.2518 Wm⁻¹K⁻¹ undiluted at 26°C
 0.479 Wm⁻¹K⁻¹ diluted to 30% at 24.5°C
 0.255 Wm⁻¹K⁻¹ undiluted at -0.6°C
 0.436 Wm⁻¹K⁻¹ diluted to 30% at -1.4°C

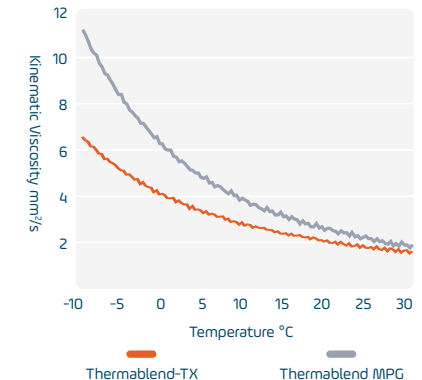
Specific Heat Capacity

2369 Jkg⁻¹K⁻¹ undiluted at 26°C
 3433 Jkg⁻¹K⁻¹ diluted to 30% at 24.5°C
 2346 Jkg⁻¹K⁻¹ undiluted at -0.6°C
 3299 Jkg⁻¹K⁻¹ diluted to 30% at -1.4°C

Prandtl Number

24°C ~ 11.64
 -1.4°C: 31.27

Low Viscosity



All of the above tests were performed by an independent laboratory, 2021.

thermablend IND

Description

Thermablend IND is an ethylene glycol based heat transfer fluid with low viscosity, high thermal conductivity and exceptional performance. Thermablend IND is biodegradable and contains a specially formulated biocide with increased thermal stability plus an organic acid technology inhibitor package which meets ASTM D-1384 and is free from any nitrite, amine, phosphate, borax, silicate and 2-Ethylhexanoate.

High Thermal Conductivity

0.259 Wm⁻¹K⁻¹ undiluted at 25°C
0.478 Wm⁻¹K⁻¹ diluted to 30% at 25°C

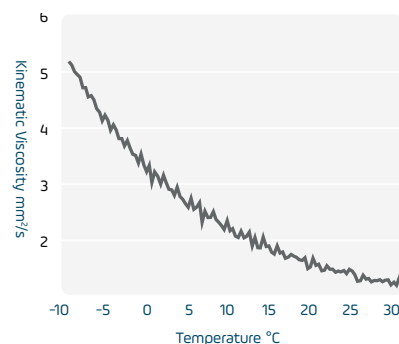
Specific Heat Capacity

2412 Jkg⁻¹K⁻¹ undiluted at 25°C
3485 Jkg⁻¹K⁻¹ diluted to 30% at 25°C

Dilution & Freeze point

Volume %	Freeze Point °C
50%	-38.7
40%	-27.1
35%	-21.3
30%	-16.7

Low Viscosity



All of the above tests were performed by an independent laboratory, 2021.

thermablend MPG

Description

Thermablend MPG is a propylene glycol based heat transfer fluid. High performance with excellent thermal conductivity. Thermablend MPG is biodegradable and contains a specially formulated biocide with increased thermal stability plus an organic acid technology inhibitor package which meets ASTM D-1384 and is free from any nitrite, amine, phosphate, borax, silicate and 2-Ethylhexanoate.

Thermal Conductivity

0.227 Wm⁻¹K⁻¹ undiluted at 25°C
0.476 Wm⁻¹K⁻¹ diluted to 30% at 25°C

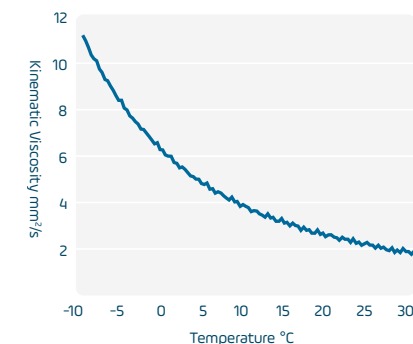
Specific Heat Capacity

2266 Jkg⁻¹K⁻¹ undiluted at 24°C
3655 Jkg⁻¹K⁻¹ diluted to 30% at 25°C

Dilution & Freeze point

Volume %	Freeze Point °C
50%	-35.4
40%	-22.7
35%	-16.9
30%	-12.4

Viscosity



All of the above tests were performed by an independent laboratory, 2021.

coolblend

Fluids for HVAC & Refrigeration

Glycol based secondary refrigerants for use throughout the HVAC sector, from refrigeration to process cooling, freezing to air conditioning.

What is Available?

- **Coolblend IND** (Ethylene Glycol)
- **Coolblend MPG** (Propylene Glycol)
- **Coolblend TX** (Non-hazardous)
- Available preblended with Serviceblend PUR (deionised water) or neat
- Multiple colour options

Product Sizes

- 1000 ltr
- 220 ltr
- 25 ltr
- 10 ltr



coolblend-TX

Description

Coolblend-TX is a non-hazardous heat transfer fluid with market leading high thermal conductivity and low viscosity for reduced parasitic pumping loads. This secondary refrigerant is for use in glycol systems throughout the HVAC sector from refrigeration to process cooling, freezing to air conditioning. Coolblend-TX contains premium multi-metal corrosion and scale inhibitors that are NSF approved and endorsed by the Energy Saving Trust. Available neat or diluted.

High Thermal Conductivity

$0.2511 \text{ Wm}^{-1}\text{K}^{-1}$ undiluted at 23°C

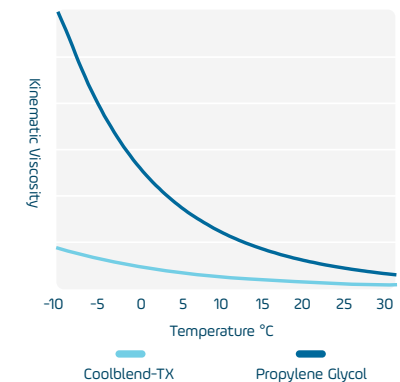
Specific Heat Capacity

$2324 \text{ Jkg}^{-1}\text{K}^{-1}$ undiluted at 23°C

Dilution & Freeze point

Volume %	Freeze Point $^{\circ}\text{C}$	Refractive Index
50%	-37.8	1.383
40%	-25.1	1.375
35%	-19.6	1.367
30%	-14.9	1.364
25%	-13.3	1.358

Low Viscosity



All of the above tests were performed by an independent laboratory, 2021.

coolblend IND

Description

Coolblend IND is an ethylene glycol based secondary refrigerant for use in glycol systems throughout the HVAC sector from refrigeration to process cooling, freezing to air conditioning. Coolblend IND contains premium multi-metal corrosion and scale inhibitors that are NSF approved and endorsed by the Energy Saving Trust. Available neat or diluted.

Dilution & Freeze point

Volume %	Freeze Point °C	Refractive Index
60%	-56.7	1.394
50%	-38.6	1.384
40%	-25	1.375
33%	-18.1	1.368
30%	-15.7	1.364
25%	-12.2	1.359

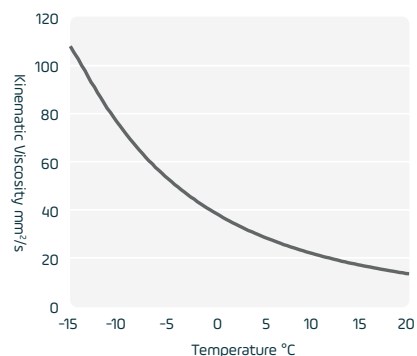
High Thermal Conductivity

0.2531 Wm⁻¹K⁻¹ undiluted at 23°C

Specific Heat Capacity

2319 Jkg⁻¹K⁻¹ undiluted at 23°C

Low Viscosity



All of the above tests were performed by an independent laboratory, 2021.

coolblend MPG

Description

Coolblend MPG is a propylene glycol based secondary refrigerant for use in glycol systems throughout the HVAC sector from refrigeration to process cooling, freezing to air conditioning. Coolblend MPG contains premium multi-metal corrosion and scale inhibitors that are NSF approved and endorsed by the Energy Saving Trust. Available neat or diluted.

Dilution & Freeze point

Volume %	Freeze Point °C	Refractive Index
60%	-51.1	1.398
50%	-32.8	1.388
40%	-21.7	1.378
33%	-14.4	1.369
30%	-11.7	1.367
25%	-9.2	1.362

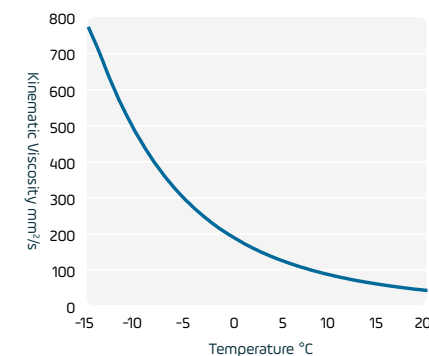
Thermal Conductivity

0.2211 Wm⁻¹K⁻¹ undiluted at 23°C

Specific Heat Capacity

2200 Jkg⁻¹K⁻¹ undiluted at 23°C

Low Viscosity



All of the above tests were performed by an independent laboratory, 2021.

serviceblend

Fluids for Servicing & Maintenance

A line of supplementary products that are specially formulated to assist in servicing and maintenance of closed-loop heating and cooling systems, designed to work optimally with our range of Heat Transfer Fluids.

What is Available?

- **Serviceblend AIR:** 2-in-1 biocide and inhibitor solution
- **Serviceblend BIO:** aqueous, broad spectrum biocide solution
- **Serviceblend INH:** NSF approved multi-metal corrosion and scale inhibitor
- **Serviceblend OAT:** ultra-high performance organic acid-based inhibitor
- **Serviceblend PRE:** pre-cleaner which loosens, mobilises and dissolves corrosion deposits
- **Serviceblend PUR:** deionised/demineralised water

Product Sizes

- 1000 ltr
- 220 ltr
- 25 ltr
- 10 ltr
- 1 ltr



serviceblend AIR

Description

Serviceblend AIR is a 2-in-1 biocide and inhibitor solution for use in air source heat pumps and closed-loop heating and cooling systems.

BS 7593:2019 is now applicable to both closed-loop heating and cooling systems. Biocide is required in cooling and low temperature heating systems, and should be considered for higher temperature systems for added protection during downtime.

Usage information

This product is intended to be used as an additive for water within closed loop heating or cooling distribution systems. This should be dosed at 1L of Serviceblend AIR per 180L system volume. Best practice for preparing and cleaning a system before commissioning can be found in BSRIA BG29/2012.

2-in-1

Serviceblend AIR rules out the need to manually measure the biocide and inhibitor as separate additives for easier installation.

NSF Approved Inhibitor

Serviceblend AIR contains a premium multi-metal corrosion and scale inhibitor. This product has been approved under the NSF/CIAS product certification scheme. Serviceblend AIR protects steel, cast iron, copper, brass and aluminium.

Highly Stable Biocide Solution

Serviceblend AIR contains a high-performing biocide designed to eliminate and prevent bacterial growth, helping maintain the efficiency, effectiveness, and life of the heating system. This biocide remains highly stable across a broad temperature range to maintain optimum performance.

serviceblend



Serviceblend BIO

Aqueous, broad spectrum biocide solution, ideally suited to shock-clean a system prior to filling with glycol.



Serviceblend INH

Multi-metal corrosion and scale inhibitor for closed-loop hot water and chilled water systems. This product has been approved under the NSF/CIAS product certification scheme.



Serviceblend OAT

Ultra-high performance multi metal corrosion inhibitor based on organic acid technology (OAT) for closed-loop hot water and chilled water systems. Suitable for industrial and domestic systems.

serviceblend



Serviceblend PRE

A pre-cleaner which loosens and dissolves commonly experienced deposits such as corrosion and scale, in preparation for flushing.



Serviceblend OLC

A blend of cleaning and dispersing agents with an effective bio dispersant. Cleans and passivates bare metal surfaces, preventing under deposit corrosion and prolonging system life.

Find out more:

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