

Heat transfer fluids (HTF) analysis

Heating, solar thermal, geothermal, cooling systems, etc.

Product information

General information

Heat transfer fluids (HTF) in heating, solar thermal, geothermal and cooling systems etc. are subject to a natural aging process. The same refers to water in central heating in accordance with VDI 2035 and water in closed cooling systems in accordance with VDI 6044. For this reason, and to avoid performance-inhibiting limescale deposits and silting in the long term, as well as for the operator unpleasant and potentially very expensive system failure due to corrosion, regular inspection of the fluid is very important. This is the point where our HTF analysis comes in.

Advantage

It is difficult to look inside the pipes to get an idea about the condition of the entire system. The heat transfer fluid though, has the possibility to provide information about the system condition. However, this requires a detailed analysis. For this purpose, the water is analysed in the laboratory and a detailed analysis report with recommendations is prepared. The advantages of this process are the following:

- easy handling
- evaluation of the analysis results
- professional advice from our qualified experts

Analysis results

- **General description** of the water sample incl. sensory assessment (turbidity, colour, odour, etc.) and chemical analysis (pH value, conductivity, hardness, etc.).
- Description of the **water quality** such as water hardness, proportion of calcium and magnesium
- Information on **wear parameters** such as iron, chromium, aluminium, nickel, copper, lead, zinc, tin

Procedure

- Please send your sample (approx. 250ml) with the completed back to the following address:
AQUA-CONCEPT Gesellschaft für Wasserbehandlung mbH
Wärmeträgeranalyse WTA
Am Kirchenhölzl 13
82166 Gräfelfing
- **Please note: without a completed order form your sample will not be processed**
- Within one week you will receive the lab report including a professional advice

Possible analyses - please specify when ordering

- **HTF analysis-Basic:** colour, refractive index, density, pH value, conductivity, water hardness, alkaline earths, calcium, magnesium, iron, chromium, aluminium, nickel, copper, lead, zinc, tin.
- **HTF analysis-Advanced:** necessary for antifreeze; same parameters as for HTF Basic + analysis of decomposition products only for glycol-based antifreezes

This leaflet can only provide non-binding information.

Status: 01/2023

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Order form

Customer

Company*: _____ Contact person*: _____
 Street/No. *: _____ Telephon: _____
 Postal code/City*: _____ E-Mail*: _____
 SAP order number/quotation number/Date: _____

Plant

Plant description*: _____
 Plant specification: Refrigerating system Heating Heat pump Air conditioning
 VDI 6044 VDI 2035 Solar thermal system Other _____
 Plant system: Closed system Open System
 Volume of the system m³: _____ Required frost protection in °C: _____
 Sampling point*: _____
 Product used so far incl. possible additives: _____
 Please make sure to discard the first litres from the sampling point
 Material used: Steel Brass Zinc Stainless steel Grey cast iron
 Red brass Copper Aluminium Other: _____

The aim or the background of the analysis

Binding order - please select

Analysis	Item-No.	Description	Price	Please select:
WTA-Basic	VB0421144	Colour, refractive index, density, pH value, conductivity, water hardness, alkaline earths, calcium, magnesium, iron, chromium, aluminium, nickel, copper, lead, zinc, tin	99,00 Euro**	<input type="checkbox"/>
WTA-Advanced	VB0421145	Same parameters as for WTA-Basic + analysis of decomposition products for glycols (necessary for antifreeze)	129,00 Euro**	<input type="checkbox"/>
Frostschutzanalyse	Single VBS421145 Double VBS421144	Determination of the frost resistance of heat transfer fluids down to -70 °C; single determination or standard-compliant double determination according to ASTM D 1177	80,00 Euro** single/ 130 Euro** double	<input type="checkbox"/>

* Required field

** The prices stated are net prices, plus the currently applicable statutory value-added tax.