



thermaliQ safe

Intended use

thermaliQ safe is an environmentally-friendly concentrate that is used in closed heating systems to prevent corrosion and to stabilise the pH value.

thermaliQ safe is designed to condition new or cleaned heating circuits.

When used with demineralised water, the criteria for "low-salt operation" as per VDI 2035 are fulfilled. The product stabilises the pH value of the heating water in the range prescribed by VDI 2035.

The conditioning of softened water is possible if no aluminium materials are installed.

thermaliQ safe is also suitable to condition heating water in floor, wall and ceiling installations where the pipes are made of plastics.

Product description and effect

thermaliQ safe provides optimum corrosion protection for all metals used in the system such as steel, copper, brass and aluminium and in addition prevents the formation of

layers and deposits.

The product does not have a dispersing effect and does not stabilise hardness.

thermaliQ safe does not have an adverse effect on the seals typically used in the heating trade.

Application and dosing

Dosing is effected by means of the thermaliQ filling pump (order no. 150 110), for instance.

New systems:

Add 1 l (0.5 percent by volume) of thermaliQ safe per 200 l of system volume. Make sure that the product is distributed evenly within the entire system (open valves, switch on circulation pumps).

Existing systems:

Prior to using thermaliQ safe, we recommend cleaning and flushing the system completely in order to remove silt deposits from the system. For system cleaning, we recommend using our cleaning agent for heating systems thermaliQ clean. After the cleaning, the system is to be filled as

described in paragraph "new systems".

On the occasion of the heating systems' yearly maintenance or during the heating water make-up feed, the concentration of thermaliQ safe has to be checked and corrected, if necessary.

The optimum operating temperature is between 10 °C and 100 °C.

Chemical analysis

A first, orienting determination can be done by conductivity measurement. In case of the optimum dosing of 0.5 percent by volume, the conductivity of the heating water increases by approx. 80 µS/cm.

Combined measuring device for pH and conductivity Order no. 170 181

Digital check of conductivity.

thermaliQ safe test kit Order no. 170 504

Check of inhibitor concentration.
Index value: 4000 – 6000 mg/l

Chemical / physical properties

Aspect		clear, green liquid
pH value (0.5 %)		approx. 8.5
Density (20 °C)	[g/cm ³]	approx. 1.1
Conductivity (0.5 %)	[μS/cm]	approx. 80
Solubility in water		infinitely miscible

Storage and shelf life

Minimum shelf life after bottling	[years]	2
Storage temperature	[°C]	0 - 40

Packaging units

Unit	Bottle	Canister	Canister
Content	1 l	5 l	10 l
Order no.	170 076	170 077	170 078

Environmental compatibility

thermalIQ safe is free of nitrite, phosphate and heavy metals. The system content may be discharged to the sewer system.

The concentrated product must not get into the sewage water in larger amounts, however.

Storage

Store the product in its original packaging in a cool, frost-proof place and protect it from light.

Safety information

The product is not a hazardous substance and is not subject to the Ordinance on Hazardous Substances.

For further information, please refer to the safety data sheet.

Please observe the common precautions as well as the protective measures regarding work hygiene when handling chemicals.

Contact

Grünbeck Wasseraufbereitung GmbH
Josef-Grünbeck-Strasse 1
89420 Hoechstaedt/Germany

☎ +49 9074 41-0

☎ +49 9074 41-100

info@gruenbeck.com
www.gruenbeck.com