



## How do you change your heating into a piggy bank?

You would like to feel warm and comfortable in your own rooms at home or provide office, working or business rooms with sufficient heat? At the same time you would like to keep the heating-costs small or without investment you would like to economize heating-costs?

**In order to satisfy this expectation we have developed for you a world-wide uniqueness!**

- Fill in Heatingblood® R1.
- Lower forward running temperature to 38 °C.
- Tune in for indoor temperature and economize heating on a long-term.

### **Further Advantages**

- Heatingblood® is a unique heat transfer fluid.
- High security against frost and quick heat exchange.
- Increased heat radiation, less dust in the indoor air.
- Neither remains of lime nor formation of rust and slurry in the heating system.
- Environmental friendly by means of less pollution-CO<sub>2</sub> biological decomposable.



ENVIRONMENTAL PROJECTS

# heatingblood®

These performances of engineers pay off! Made in Germany.

**Heatingblood® replaces the water in the heating. The advantages offered by Heatingblood® are multiple.**

## Only 38 °C in the forward run of?

For normal heating systems Heatingblood® needs a forward-run temperature of approx. 38 °C, in order to get the effect of 22 °C indoor temperature.

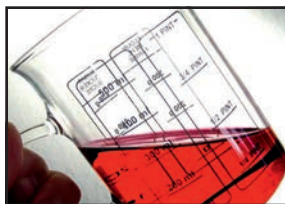
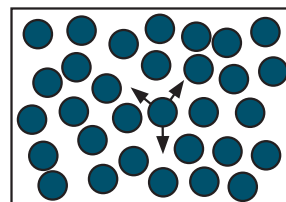
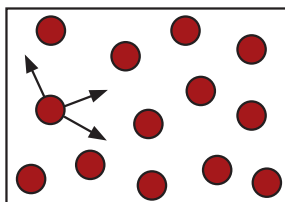
This phenomenon is worldwide unique! Yet, the water has to be heated to 54 °C in order to produce the same temperature! This makes it possible to reduce the forward-run temperature up to 16 °C! With Heatingblood® all burn-value-systems can be optimized by low return flow temperature!

## Lowering temperature = Lower costs

A lower temperature of boiler of approx. 40 °C minimizes the consumption of fuels like wood, gas and oil. If this is combined with a periodical lower indoor temperature by means of programmable thermostat-valve, energy can be economized by approx. 10-27%. Although you lower the performed temperature, you will not have to become cold.

**Why Heatingblood® compared to water does heat twice as much, even though energy supply remains the same?**

The structure of molecules is the reason why! The molecules of Heatingblood® can move quicker. The circulation-energy produces heat.



*The first "School of Environment" in Hamburg, Germany has been equipped 2013 with Heatingblood®.*

## Before you start with filling-in!

Inappropriate paperboard gaskets of heating circuit have to be exchanged with glycol-washers.

In order to offer the possibility of protection against frost your heat exchanger should be capable to operate without any hindrances with glycol containing heat carriers. Please

pay attention to the LMP fill-in instructions and the data leafs about security under download [www.heizungsblut.de](http://www.heizungsblut.de)

**How does it happen, that Heatingblood® enters into the heating-system circuit?**

It is not necessary to take measures of restructure the heating system, but only to let the old heating-water be drained of, flush out and fill in the Heatingblood® – ready. Do you know an easier way and more effective form of economizing energy? Fill in and economize – there is no easier way.

## Which characteristics does Heatingblood® have?

Heatingblood® is environmental, biologically decomposable and absolutely harmless (Level 1 in danger for water). In future there will be neither corrosion nor lime appearing in your heating system, neither any appearance of sediments of seaweed, rust, mud or bacteriologies in the heating system circuit will have to be expected. By means of your Heatingblood® your heating system is protected against frost until to -63 °C. As Heating-Blood® proves to have a much higher heating transfer as water, the heating degree lies at approx. +200°C. Heatingblood® is free from sediments like nitrate, phosphates and amines. Heatingblood® behaves in operation of heaters and installations of solar heaters extremely stable and can be mixed with water (PH-value 8. 2). Since 2005 Heatingblood® has been approved as good in several countries.

# Lowering heating-costs!



*Filling in Heatingblood®-Functions without complications here properly executed by an expert.*

## **Introduce your own change of energy!**

Five Universities as well as the State Research Laboratory for Heating Technics and Hydraulic in Eutin have analyzed Heatingblood® for many years. Thereby it was possible to confirm scientifically its special values, above all speed of heat transfer, the extraordinary behavior of temperature and the energy efficiency. You will find the scientific dates and facts under

- [www.heizungsblut.de](http://www.heizungsblut.de) → Forschungsergebnisse (results of research)
- Forschungslabor (research laboratory)



*A brick for a better future – our children say thank you.*

## **Reduce consumption of valuable raw materials and also your heating costs with Heatingblood®!**

Reduce the consumption of CO<sub>2</sub> by less usage of oil, gas, peels and other fuels. This will prove to be profitable depending on the substance of construction, the heating system and the behavior of users.

## **Further possibilities of usage**

All office/living facilities, near and remote heat, hospitalities, schools, pensions for the elderly, administrations, solar thermic and geo thermic installations and cold-storage chambers, swimming-pools, football stadiums and industry.

## **Is the exchange of the heater profitable?**

Yes, you can reduce your usual heating costs until 22% by means of a hydraulic adaptation of the heating installation and other measures, like for example usage of LMP climate-coatings, so that more costs will be economized.

## **How do you create well-being at home?**

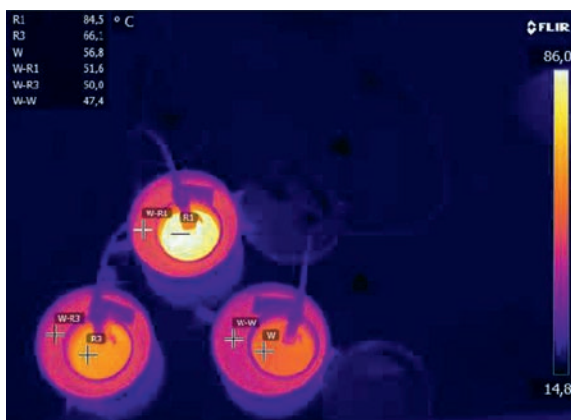
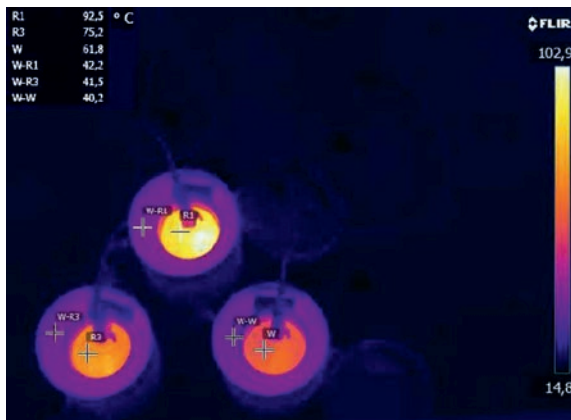
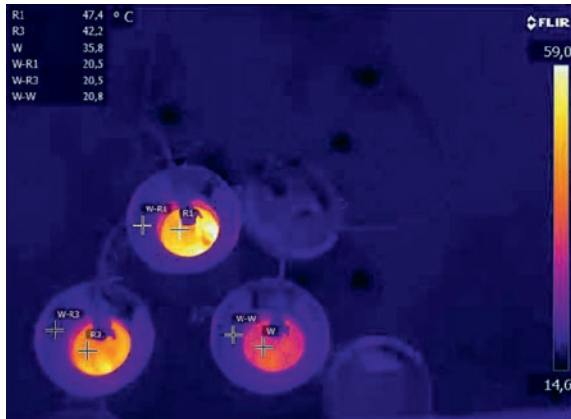
By means of Heatingblood® there is a higher degree of radiation heat being released. One can enjoy an indoor climate, which is more agreeable and comfortable with less air circulation. By means of Heatingblood® less dust resides in the air! This is optimal for allergists.

## **This is extra – kill a lot of birds with one stone**

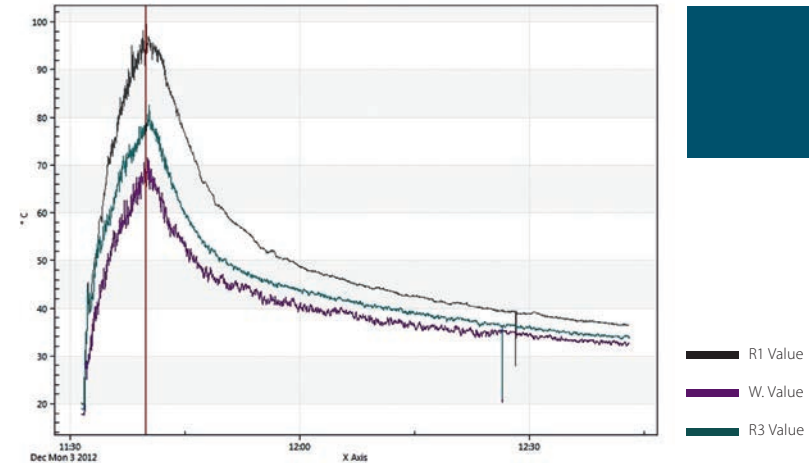
Burn less raw materials, reduce CO<sub>2</sub>, have higher comfort, security against frost by -63 °C, quick heat transfer and lower heating costs!

## **Contact:**

Further informations: [info@heizungsblut.de](mailto:info@heizungsblut.de)  
Assure yourself now an appointment for consultancy  
tel.: +49 40-608 27 56, LMP Hamburg, Germany



Time	R1 Value	Water	R3 Value
11:37:13	84.3297282	57.789108	70.5398998
11:37:16	84.3553135	58.1096472	72.1607215
11:37:18	83.6459869	59.5654091	70.9119215
11:37:20	86.8857841	62.6480013	69.5682687
11:37:22	87.8239178	60.7767924	71.1300531
11:37:24	86.3262885	57.4882289	71.5884855
11:37:26	84.96393	59.4245568	72.5057794
11:37:28	85.701491	58.8091425	71.4404585
11:37:30	85.0955739	57.8145754	71.7779322
11:37:32	87.4978363	60.3275223	71.5607415
11:37:34	84.3467855	61.2742752	72.1837498
11:37:36	90.0520935	58.7686903	72.2758283
11:37:38	89.9229606	59.4396551	71.6300918
11:37:41	86.2546395	59.3591118	71.930244
11:37:43	86.3473559	59.8968463	74.2693849
11:37:45	86.7387287	60.1223682	72.0962232
11:37:47	88.3118687	59.5352387	71.9071769
11:37:49	87.564776	60.567315	72.3494507
11:37:51	88.4325976	59.2331678	72.8408821
11:37:53	87.6525942	59.3591118	71.3432364
11:37:55	87.3094263	63.0261205	73.2758697
11:37:57	89.7426304	63.7646923	72.9417269
11:37:59	89.8994945	59.9620351	71.934857
11:38:01	94.9623254	59.9419803	70.4327716
11:38:03	91.2312153	62.9280055	73.636652
11:38:05	88.3451818	60.3275223	71.902563
11:38:08	91.5543813	62.6184946	72.4782038
11:38:10	88.2910447	61.7650327	72.5425392
11:38:12	88.6737995	66.0680903	73.3627181
11:38:14	93.6708363	64.1836177	70.953716
11:38:16	87.8113878	62.584624	72.5011838
11:38:18	88.2618868	64.1641602	73.5362667
11:38:20	88.8773082	62.4413242	73.9009882
11:38:22	90.0644605	64.2419742	72.9096472
11:38:24	91.7422782	63.7305391	74.4419084
11:38:26	92.3698589	63.3347366	74.6278351
11:38:28	92.1174671	66.1688626	74.3011801
11:38:30	90.233387	63.6817345	73.408408
11:38:33	90.2210321	61.9974144	73.5088774
11:38:35	91.8891872	65.2641867	72.7399702
11:38:37	92.178563	67.3536521	73.6457746
11:38:39	90,3116141	65,2883212	74,5235624
11:38:41	92.1907796	62.3082992	73.7232952
11:38:43	93.2382427	65.0564617	73.5453953
11:38:45	90.0067403	64.7612631	74.2103191
11:38:47	92.479658	61.784825	75.1707239
11:38:49	91.3744641	63.7500562	75.4639933
11:38:51	91.9095814	64.945229	74.7727926
11:38:53	94.0862622	65.249704	74.2284956
11:38:55	91.0673578	67.3488941	74.2602993



**Evidence:**

Heatingblood® R1 and R2 heats to a much higher degree.

**Specials:**

Heatingblood® R1 cools down. You economize real heating costs. Moreover, our heaters R1 and R3 can be used for cooling of residences and store halls, etc.

**Comparison among heating systems at 1.0 bar**

Heatingblood® \*R1      Water      Heatingblood® \*R3  
**92.2 °C**                      **62.3 °C**                      **73.7 °C**

\*Infra-read tests CalPlus GmbH, Hamburg, 12/2012.  
 \*\*Technical University Hamburg-Harburg (TUHH) ©LMP – Environmental Projects Hamburg, 2013