



Technical data sheet

# Heat Range

# 1. Heat Range

Our extremely heat-resistant torque sealant. It is water-based, contains no solvents and does not require labeling.



# 1.1 Overview Heat Range

## a) Properties

- Heat-resistant up to at least 600°C
- Water-based
- Solvent-free
- Fast drying
- Insulating
- Good media resistance

## b) Flow behavior

- Medium-Flow

## c) Norms

- UV and weather resistant for at least 4 years\*

\*according to DIN EN ISO 2810

## d) Industry specifications

- Boeing-Specification BMS8 45 Type II
- Rolls-Royce-Specification MSRR1102
- Bosch-Norm 2580-1

## e) Containers and suggested screw sizes

Container	Screw sizes
Tube 20 ml	M3 - M24
Tube 50 ml	M12 - M48
Cartridge 30 ml	M12 - M48
Cartridge 50 ml	M1 - M48
Can 1 kg	-

## f) Colours and item numbers

Colour	RAL	Container	Item no.
● Brick red	010 50 20	20 ml Tube	13000H-T.02
		50 ml Tube	13000H-T.05
		30 ml Cartridge	13000H-KAR.03
		50 ml Cartridge	13000H-KAR.05
		1 kg Can	13000H-D1

## 1.2 Technical data\*

	Heat Range
Viscosity	15.000 - 20.000 mPas
VOC content	0 g/L
Application temperature	2° C - 35° C
Temperature stability	-80°C - 600°C
pH value	10 - 11
Flashpoint	-
Touch dry after	ca. 10 - 15 min
Fully hardened after	ca. 24 Hours
Density	ca. 1,00 g/cm <sup>3</sup>
Shelf life	12 Months

\* All values are subject to change. The corresponding tests are still ongoing.

## 1.3 Media resistance

Medium	Heat Range
Water	●
Gasoline	●
Super 95	●
White spirit 135/175	●
Special boiling point product 100/140	●
Ethanol	●
Isopropyl alcohol (IPA)	●
n-Butanol	●
2-Methoxy-1-Propanol	●
Butylacetate	●
Ethylacetate	●
Acetone	●
Methyl ethyl ketone (MEK)	●
Titanium grease	●
WD-40	●
Hydrochloric acid 0,5 mol/l	●
Hydrofluorether	●
Skydrol LD4	●
Skydrol 5	●

- Resistant: no or very slight impairment
- Conditionally resistant: weak to moderate attack
- ✗ Unstable: strong attack / paint dissolves in medium

## 1.4 Security levels

The Heat Range is available in the tamper-evidents Basic, Secure and Topsecure (BäderIdent®).

### 1.4.1 Basic

This tamper-evident is the basic version (without the addition of special marker particles) of the Heat Range.

#### a) Storage at room temperature (approx. 20°C)\*

Container	Duration
Tube 20 ml / 50 ml, Can 1 kg	from production 4 year
Cartridge 30 ml / 50 ml	from production 6 months

### 1.4.2 Secure

The tamper-evident Secure contains a concealed security feature that can be made visible on the sealant by shining a 300 mW IR emitter (980 nm) on it.

#### a) Colours and item numbers

Colour	RAL	Container	Item no.
● Brick red	010 50 20	20 ml Tube	13002H-T.02
		50 ml Tube	13002H-T.05
		30 ml Cartridge	13002H-KAR.03
		50 ml Cartridge	13002H-KAR.05
		1 kg Can	13002H-D1

#### b) Storage at room temperature (approx. 20°C)\*

Container	Duration
Tube 20 ml / 50 ml Can 1 kg	from production 1 year
Cartridge 30 ml / 50 ml	from production 6 months

\* Longer storage times may be possible, please test before use. The product has a longer shelf life when refrigerated. Protect from sunlight.

### 1.4.3 Topsecure (Bäder-Ident®)

The tamper-evident Topsecure (BäderIdent®) offers an unambiguous product identification, making it an effective means against product counterfeiting and manipulation of every kind.

The BäderIdent® sealant system contains an individual code which consists of a specific fluorescent marker particle and a color.

By means of a suitable analyser, you can always check on site the authenticity and integrity of your product.

#### a) Colours and item numbers

Colour	RAL	Container	Item no.
● Brick red	010 50 20	20 ml Tube	13001H-T.02
		50 ml Tube	13001H-T.05
		30 ml Cartridge	13001H-KAR.03
		50 ml Cartridge	13001H-KAR.05
		1 kg Can	13001H-D1

#### b) Storage at room temperature (approx. 20°C)\*

Container	Duration
Tube 20 ml / 50 ml Cartridge 30 ml / 50 ml Can 1 kg	from production 6 months

\* Longer storage times may be possible, please test before use. The product has a longer shelf life when refrigerated. Protect from sunlight.

## 1.5 Further information

### **Pretreatment of surfaces**

Surfaces must be cleaned of grease, oil, humidity and rust. Please perform compatibility tests to your application/material demands.

### **Processing**

Apply directly to fittings dropwise, use the extension-tip to reach even poorly accessible connections (tube).

### **Cleaning**

Product residues and impurities are easily removed with Universal Tamper Proof Sealant Remover.

### **Personal protection measures**

Respiratory protection not required in well-ventilated areas; avoid inhalation of fumes; ensure sufficient ventilation!

### **Firefighting**

Foam, CO<sub>2</sub>, extinguishing powder or sand, never use full water jet.

### **Accidental release measures**

Absorb with binding material (e.g. sand, diatomaceous earth, acid binder, universal binder) and dispose of in accordance with the local regulations.

### **Disposal**

Dispose of product residues and packaging in accordance with the local regulations.

## 2. Greenmark®

The sub-brand Greenmark® comprises all marking systems of Lackfabrik Bäder GmbH & Co. KG, which are free of hazardous substances and have a particularly gentle effect on people and the environment.

It is the result of Bäder®'s strategic decision to rely largely on high-performance water-based marking systems for new developments and thus to decisively improve the ecological footprint. The Zero range marks the beginning and will be completed by further high-performance systems this year and in the coming year.

### Properties of all Greenmark® products

- Water-based
- VOC-free
- HAP-free
- No dangerous goods
- Insulating
- Good media resistance



Designed for  
the future



# 3. Disclaimer

The above information in this technical data sheet (TDS), in particular suggestions for the processing and application of our products, is based on our current knowledge and experience. Due to the different application possibilities and the application and working conditions beyond our control, we assume no liability for the suitability of our products for the relevant production processes under the specific working conditions and the intended processing purposes and results. To ensure such suitability, we recommend in any case that you carry out sufficient trials and tests yourself beforehand.

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We are certified according to DIN EN ISO  
9001:2015



Our products are produced in Germany and  
the EU

