



Content




1. Comparison of our Tamper Proof Sealants	2
1.1 Technical data	2
1.2 Further information	3
2. Standard Range	4
2.1 Technical data	5
2.2 Media resistance	6
2.3 Security levels	7
2.4 Further information	8
3. Zero Range	9
3.1 Product overview	9
3.1.1 Torque sealant	10
3.1.2 Brush Marker	10
3.1.3 High Precision Marker	11
3.2 Technical data	
3.3 Media resistance	11
3.4 Security levels	12
3.5 Further information	13
4. Fast Dry Range	14
4.1 Technical data	15
4.2 Media resistance	16
4.3 Security levels	17
4.4 Further information	18
5. Universal Tamper Proof Sealant Remover	19
5.1 Technical data	19
5.2 Further information	20
6. Disclaimer	21





1. Comparison of our Tamper Proof Sealants

1.1 Technical data

	Standard Range	Zero Range  	Fast Dry Range 
Viscosity	15.000 - 20.000 mPas	10.000 - 30.000 mPas	20.000 - 30.000 mPas
VOC content	540 g/L ±20 g/L*	0 g/L	520 g/L ±20 g/L*
Application temperature	-20° C - 35° C	2° C - 35° C	-20° C - 35° C
Temperature stability	-80° C - 125° C	-80° C - 90° C	-80° C - 125° C
pH value	-	ca. 8 - 9	-
Flashpoint	29° C	-	-4° C
Touch dry after	ca. 5 min**	ca. 10 min**	ca. 1min**
Fully hardened after	ca. 24 hours**	ca. 12 hours**	ca. 24 hours**
Density	ca. 1,05 g/cm ³	ca. 0,98 g/cm ³	ca. 1,05 g/cm ³
Shelf life	24 Months	12 Months	12 Months

* May vary slightly depending on the colour.




** Touch dry and through-drying speed are strongly dependent on the coating thickness and the ambient conditions. Please test for your own application.





Comparison of our Tamper Proof Sealants

1.2 Media resistance

	Standard Range	Zero Range  	Fast Dry 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	●	●	●

- Resistant: no or very little impairment
- Limited resistance: weak to moderate attack
- ✗ Unstable: strong attack / paint dissolves in medium





2. Standard Range

Tamper proof sealant



Properties

- Fast drying
- Insulating
- Good media resistance

Flow properties

≈ Flow

Container and suggested screw sizes

- ! Tube 20 ml
- ! Cartridge 30 ml / 50 ml
- Can 1 kg
- ! M1 - M24
- ! M3 - M12

Colours / Item numbers

				
Transparent #10080	White #11000	Yellow #12000	Orange #12200	Red #13000
				
Pink #13200	Blue #14000	Green #15000	Gray #17000	Black #18000

The Schraubensicherungslack (tamper proof sealant) of Lackfabrik Bäder GmbH & Co. KG is the reference since 1962 in the market of tamper proof sealants and for years has been used millionfold in small, medium, large and global industrial companies.

Our Schraubensicherungslack Standard is the essential tool to protect, mark, fill and seal work involving all kinds of screw securing jobs. It is used for quality assurance and to safeguard against manipulation in machine-building, precision-engineering, the automotive industry and electronics.

Standards

UV- and weather-resistant for min. 10 years*

Industry specifications

- Airbus Specification ECS-L 2274
- Boeing Specification BMS8 45 Type II
- Rolls-Royce Specification MSRR1102
- Bosch Norm 2580-1
- Safran Specification HMDC6002

*according to DIN EN ISO 2810



Standard Range

2.1 Technical data

Viscosity	15.000 - 20.000 mPas
VOC content	540 g/L ±20 g/L*
Application temperature	-20° C - 35° C
Temperature stability	-80° C - 125° C
pH value	-
Flashpoint	29° C
Touch dry after	ca. 5 min**
Fully hardened after	ca. 24 hours**
Density	ca. 1,05 g/cm ³
Shelf life	24 Months

* May vary slightly depending on the colour.

** Touch dry and through-drying speed are strongly dependent on the coating thickness and the ambient conditions. Please test for your own application.





Standard Range

2.2 Media resistance

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	●

- Resistant: no or very little impairment
- Limited resistance: weak to moderate attack
- × Unstable: strong attack / paint dissolves in medium





Standard Range

1.3 Security levels

The Standard Range is available in the security levels Basic, Secure and Topsecure (BäderIdent®).

Basic

The security level Basic constitutes just the lacquer without the admixture of marking particles.

Storage*

20 ml tube and 1 kg can:

Shelf life at room temperature (ca. 20°C) is 2 years.

30/50 ml cartridge:

Shelf life at room temperature (ca. 20°C) is 6 months.

Secure



The security level Secure contains a hidden security feature which can be made visible (fluorescence) with a 300 mV infrared laser pointer (980 nm)

Storage*

20 ml tube and 1 kg can:

Shelf life at room temperature (ca. 20°C) is 1 year.

30/50 ml cartridge:

Shelf life at room temperature (ca. 20°C) is 6 months.

Colours / Item numbers

- White #11002; Yellow #12002; Orange #12202; Red #13002; Pink #13202;
- Transparent #10082;

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





Standard Range

**Topsecure
(BäderIdent®)**

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

Colours / Item numbers

○ White #11001; ● Yellow #12001; ● Orange #12201; ● Red #13001; ● Pink #13201; ● Blue #14001; ● Green #15001;

Storage

20 ml tube, 30/50 ml cartridge and 1 kg can:
Shelf life at room temperature (ca. 20°C) is 6 months.

2.4 Further information**Ordinance on hazardous substances**

The mixture is classified as hazardous according to regulation (EC) No 1272/2008 [CLP].

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, CO₂, 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.



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 com-

pleted by further high-performance systems this year and in the coming year.

Properties

- **Without organic solvents**
- **Water-based**
- Insulating
- Good media resistance

3. Greenmark[®] - Zero Range

Aqueous tamper proof sealant

The **Zero Range** (aqueous tamper proof sealant) from Lackfabrik Bäder GmbH & Co. KG is the first 100% water-based securing lacquer system that works completely without organic solvents (VOC-free). In addition to its excellent adhesive properties, it has good breaking properties and a drying speed that is phenomenal for water-based systems. Furthermore, it is not a hazardous material, which leads to a significant risk minimization for the user during its processing.

Our Zero Range is the essential tool to protect, mark, fill and seal work involving all kinds of screw securing jobs. It is used for quality assurance and

to safeguard against manipulation in machine-building, precision-engineering, the automotive industry and electronics.

Standards

UV- and weather-resistant for min. 4 years (and counting)*

Industry specifications

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

*according to DIN EN ISO 2810



Greenmark[®] - Zero Range

3.1 Product overview

3.1.1 Torque sealant



Key Feature

- **Food safe***

Flow properties

~ Medium-Flow

Container and suggested screw sizes

- ▼ Tube 20 ml
 - ▩ Cartridge 30 ml / 50 ml
 - Can 1 kg
- ⚙ M1 - M24
 - ⚙ M3 - M12

Colours / Item numbers

- | | | | | |
|---------|---------|-------------|---------|---------|
| | | | | |
| White | Yellow | Neon Orange | Red | Blue |
| #11000w | #12000w | #12200w | #13000w | #14000w |
| | | | | |
| Green | Gray | Black | | |
| #15000w | #17000w | #18000w | | |

3.1.2 Brush Marker**



Key Features

- **Ideal for sealing bolts, nuts and adjustable parts**
- Provides good anti-fungal properties and resists mold growth
- Fluoresces under black light

Flow properties

≈ Flow

Container and suggested screw sizes

- ▩ Pinselflasche 15 ml
- ⚙ M1 - M3

Colours / Item numbers

-
- Neon Red
- #13050w

* according to Regulation (EC) No. 1935/2004 and complies with the regulations of the German Food and Feed Code LFGB).

** Brush Marker and High Precision Marker are only available in Basic security level.





Greenmark® - Zero Range

3.1.3 High Precision Marker*



Key Features

- Enables highly precise and clean work on smallest parts
- Perfectly suited for labeling/marketing a wide variety of workpieces
- Fluoresces under black light

Flow properties

≈ Flow

Container and suggested screw sizes

Tropfflasche 20 ml

M1 - M3

Colours / Item numbers

Neon Red
#13060w

3.2 Technical data

Viscosity	10.000 - 30.000 mPas
VOC content	0 g/L
Application temperature	2° C – 35° C
Temperature stability	-80° C - 90° C
pH value	ca. 8 - 9
Flashpoint	-
Touch dry after	ca. 10 min**
Fully hardened after	ca. 12 hours**
Density	ca. 0,98 g/cm ³
Shelf life	12 Months

* Brush Marker and High Precision Marker are only available in Basic security level.

** Touch dry and through-drying speed are strongly dependent on the coating thickness and the ambient conditions. Please test for your own application.



Greenmark[®] - Zero Range

3.3 Media resistance

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	●

- Resistant: no or very little impairment
- Limited resistance: weak to moderate attack
- ✘ Unstable: strong attack / paint dissolves in medium





Greenmark[®] - Zero Range

3.4 Security levels

The Zero Range is available in the security levels Basic, Secure and Topsecure (BäderIdent[®])*.

Basic

The security level Basic constitutes just the lacquer without the admixture of marking particles.

Storage**

15 ml brush bottle, 20 ml tube, 20 ml dropping bottle:

Store between 10 - 18° C. Shelf life: one year.

30/50 ml cartridge and 1 kg can:

Store between 10 - 18° C. Shelf life: 6 months.

Secure



The security level Secure contains a hidden security feature which can be made visible (fluorescence) with a 300 mV infrared laser pointer (980 nm).

Colours / Item numbers

○ White #11002w; ● Yellow #12002w; ● Orange #12202w; ● Red #13002w;

Storage**

20 ml tube:

Store between 10 - 18° C. Shelf life: one year.

30/50 ml cartridge and 1 kg can:

Store between 10 - 18° C. Shelf life: 6 months.

* Brush Marker and High Precision Marker are only available in Basic security level.

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



Greenmark[®] - Zero Range

Topsecure (BäderIdent[®])



The security level Topsecure (BäderIdent[®]) offers an unambiguous product identification, making it an effective means against product counterfeiting and manipulation of every kind. The BäderIdent[®] lacquer 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.

Colours / Item numbers

○ White #11001f; ● Yellow #12001f; ● Orange #12201f; ● Red #13001f; ● Blue #14001f; ● Green #15001f;

Storage

20 ml tube, 30/50 ml cartridge and 1 kg can:
Store between 10 - 18° C. Shelf life: 6 months.

3.5 Further information

Ordinance on hazardous substances

This mixture is not classified as hazardous according to Regulation (EC) 1272/2008 [GHS].

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 protective measures

Avoid contact with eyes.

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.



4. Fast Dry Range

Fast drying tamper proof sealant



Properties

- Extremely fast drying
- Excellent anti-flow behaviour
- Insulating
- Good media resistance

Flow properties

Anti-Flow

Container and suggested screw sizes

Tube 20 ml

M1 - M24

Cartridge 30 ml / 50 ml

M3 - M12

Can 1 kg

Colours / Item numbers



White
#11000f



Yellow
#12000f



Orange
#12200f



Red
#13000f



Pink
#13200f



Blue
#14000f



Green
#15000f



Gray
#17000f



Black

The Schraubensicherungslack Fast Dry from Lackfabrik Bäder GmbH & Co. KG is an extremely fast drying tamper proof sealant (torque seal), which is characterized by an excellent anti-flow behavior and good adhesion properties.

Our Schraubensicherungslack Fast Dry is the essential tool to protect, mark, fill and seal work involving all kinds of screw securing jobs. It is used for quality assurance and to safeguard against manipulation in machine-building, precision-engineering, the automotive industry and electronics.

Standards

UV- and weather-resistant for min. 3 years (and counting)*

Industry specifications

- Airbus Specification ECS-L 2274
- Boeing Specification BMS8 45 Type II
- Rolls-Royce Specification MSRR1102
- Bosch Norm 2580-1
- Safran Specification HMDC6002

*according to DIN EN ISO 2810



Fast Dry Range

4.1 Technical data

Viscosity	20.000 - 30.000 mPas
VOC content	520 g/L ±20 g/L*
Application temperature	-20° C - 35° C
Temperature stability	-80° C - 125° C
pH value	-
Flashpoint	-4° C
Touch dry after	ca. 1min**
Fully hardened after	ca. 24 hours**
Density	ca. 1,05 g/cm ³
Shelf life	12 Months

* May vary slightly depending on the colour.

** Touch dry and through-drying speed are strongly dependent on the coating thickness and the ambient conditions. Please test for your own application.





Fast Dry Range

4.2 Media resistance

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	●

- Resistant: no or very little impairment
- Limited resistance: weak to moderate attack
- × Unstable: strong attack / paint dissolves in medium





Fast Dry Range

4.3 Security levels

The Fast Dry Range is available in the security levels Basic, Secure and Topsecure (BäderIdent®).

Basic

The security level Basic constitutes just the lacquer without the admixture of marking particles.

Storage*

20 ml Tube und 1 kg can:
Shelf life at room temperature (ca. 20°C) is 12 months.

Secure

The security level Secure contains a hidden security feature which can be made visible (fluorescence) with a 300 mV infrared laser pointer (980 nm).

Storage*

20 ml Tube und 1 kg can:
Shelf life at room temperature (ca. 20°C) is 12 months.

Colours / Item numbers

○ White #11002f; ● Yellow #12002f; ● Orange #12202f; ● Red #13002f; ● Pink #13202f;

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





Fast Dry Range

Topsecure (BäderIdent®)



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

Colours / Item numbers

○ White #11001f; ● Yellow #12001f; ● Orange #12201f; ● Red #13001f; ● Pink #13201f; ● Blue #14001f; ● Green #15001f;

Storage

20 ml Tube und 1 kg can:

Shelf life at room temperature (ca. 20°C) is 6 months.

4.4 Further information

Ordinance on hazardous substances

The mixture is classified as hazardous according to regulation (EC) No 1272/2008 [CLP].

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, CO₂, 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.



5. Universal Tamper Proof Sealant Remover



Properties

- Easy handling
- Solvent saving
- Universally applicable

Fully hardened after:

#10091

The Universal Tamper Proof Sealant Remover from Lackfabrik Bäder GmbH & Co. KG is the first tamper proof sealant remover available on the market. It is ideally suited for quickly removing tamper pro-

of sealants. This is particularly relevant in areas where frequent opening of the secured screw, plug or housing connection is necessary.

5.1 Technical data

Viscosity	ca. 7.500 mPas
VOC content	847 g/L
Application temperature	+5 - 30° C
Temperature stability	up till 125° C
Flashpoint	-20° C
Density	ca. 0,86 g/cm ³





Universal Tamper Proof Sealant Remover

5.2 Further information

Ordinance on hazardous substances

The mixture is classified as hazardous according to regulation (EC) No 1272/2008 [CLP].

Processing

Apply dropwise and remove by washing with a suitable solvent (e.g. acetone or butyl acetate) or with the Bäder Universal-Diluent after 30 min. of exposure.

If the tamper proof sealant has run into the thread, a second application of the remover may be necessary after removing the upper lacquer layer at the affected area.

Cleaning

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

Personal protective measures

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

Firefighting

Foam, CO₂, 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





6. 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 various possible applications and due to the fact that the application and working conditions of our customers are beyond our control, we do not accept any liability for the suitability of our products for the relevant production processes under the specific working conditions and the intended processing purposes and results. In order to ensure such suitability, we recommend in any case sufficient previous own trials and tests.

Any liability resulting from the information given in this technical data sheet and any other written or oral advice given for the present product is expressly excluded, unless otherwise agreed in individual contracts, unless there is a case of injury to life, limb or health, unless we have acted with intent or gross negligence or unless liability exists under mandatory product liability law.

The data contained herein is for information purposes only and is considered reliable to the best of our knowledge. However, we cannot accept liability for results obtained by others over whose methods we have no control. It is the responsibility of the user to determine the suitability of production methods mentioned herein for his own purposes and to take such precautions as would be advisable

to protect property and persons from the hazards that may arise from the handling and use of these products. Accordingly, Lackfabrik Bäder GmbH & Co. KG specifically rejects any claims arising from the sale or use of products of Lackfabrik Bäder GmbH & Co. KG, including all warranty obligations or guarantees of suitability for a specific purpose. The company Lackfabrik Bäder GmbH & Co. KG rejects in particular any liability for consequential or indirect damages of any kind, including lost profits.

