





# **Epoxy Universal**

Crack-bridging protective coating



Colour	Availability			
	Quantity per pallet			
	Packaging unit	5 kg	10 kg	30 kg
	Type of container	Tin bucket	Tin bucket	Tin bucket
	Container code	06	11	31
	Art. no.			
black	5590			
	5592			

Application rate	According to authorisation
Range of use	Crack-bridging protective coating for reinforced concrete tanks
	<ul> <li>Anti-corrosion coating for steel and galvanised steel</li> <li>Coating for liquid manure/silage and biogas facilities, tanks and horizontal silo walls</li> </ul>
	(AbZ Z-59.17-436)
Property profile	■ With static crack-bridging ability
	Can be subjected to chemical loads
	Application by brush or spraying
	Contains solvents

# Characteristic data of the product

## On delivery

	Component A	Component B	Mixture
Density (20 °C)	1.37 g/cm <sup>3</sup>	1.08 g/cm <sup>3</sup>	1.30 g/cm <sup>3</sup>
Viscosity (25 °C)	2000 mPa s	5650 mPa s	1900 mPa s

## Once fully cured

Crack bridging class A 2 (> 0.25 mm)

The values stated represent typical characteristic data of the product and are not to be understood as binding product specifications.

## Certificates

- > General building inspectorate approval Z-59.15-368
- > Certificate of compliance Z-59.15-368





- General building inspectorate approval Z-59.17-436
- > Certificate of compliance Z-59.17-436

## **Additional information**

#### > Processing instructions

#### **Preparation**

#### Substrate requirements

The substrate must be firm, dimensionally stable, capable of bearing loads and free of loose constituents, dust, oil, grease, rubber marks and other substances that could interfere with adhesion.

The adhesive pull strength of the surface after priming must be at least 1.5 N/mm² on average (smallest single value min. 1.0 N/mm²), compressive strength at least 25 N/mm². For works within the framework of the general building inspectorate approval, the substrates must correspond to the requirements of the approval and the system products mentioned therein must be used.

## Substrate preparation

Prepare the substrate by suitable means, e.g. steel ball jetting or diamond grinding, so that it meets the requirements specified above.

Before coating, close pipes and pores using a stable material, e.g. Epoxy MT 100 with the addition of a standardising agent (Add TX).

Remove rust and rolling skin from steel surfaces e.g. by sandblasting SA 2 1/2.

## Production of the mixture





#### Combi-container

Add the entire quantity of the hardener (component B) to the basic compound (component A).

Mix thoroughly with a slow-speed electric mixer

(approx. 300 - 400 rpm).

Pour the mixture into a separate container and mix again thoroughly.

Mix for at least 3 minutes.

Insufficient mixing is indicated by streaks forming.

When working with airless spraying equipment (e.g. Storch SL 1100 – piston stroke pump), the prepared mixture can be mixed with up to 20% by mass of Thinner V 103 to achieve the spraying viscosity.

Mixing ratio (A:B) 75:25 parts by weight

As soon as the mixture is ready to use, apply it in full to the prepared surface and spread it using suitable tools.

## **Directions**







For professional users only!

#### Conditions for use

Temperature of the material, air and substrate: from min. +10 °C to max. +25 °C After application, protect the surface for at least 48 hours from exposure to water and moisture.

Relative humidity should not exceed 80%.

The temperature of the substrate must be at least 3 °C above the dew point temperature during application and curing.

## Working time (+20 °C)

approx. 120 minutes

■ Waiting time (+20 °C)





Waiting times between coats should be at least 12 hours and max. 48 hours. If conditions on site require longer waiting times, the surface must be slightly sanded (until it turns white) before the following application.

## ■ Drying time (+20 °C)

Foot traffic after 12 hours, mechanical loading after 2 days, full loading capacity after 7 days.

As a general principle, higher temperatures will reduce and lower temperatures will increase the times stated.

## **Application examples**

#### Coating

Apply the material to the prepared surface and spread evenly using a suitable tool, e.g. an epoxy roller.

Three-layer application in alternating colours (black/black-red/black) according to test certificate.

Application rate

1.2 kg/m<sup>2</sup> binder in three coats

#### **Notes**

Unless otherwise specified, all of the values and application rates given above have been determined under laboratory conditions (20 °C) using standard colours. Slight deviations from these values may arise if the product is worked with on site.

Not suitable for frequent or constant thermal loads > 60 °C.

The maximum application quantity of 0.40 kg/m² per coat must not be exceeded, otherwise the adhesion of intermediate layers may be affected.

In case of repairs on the surface or working up to existing surfaces, there will be a visible transition in appearance and texture.

Highly abrasive loads lead to increased wear.

Suitable for vehicle traffic with rubber tyres; not suitable for vehicle loads with metal or polyamide tyres nor for dynamic point loads.

Epoxy resins are generally not colourfast when exposed to UV light or weather.

Further notes on working, system construction and maintenance of the listed products can be found in the latest Technical Data Sheets and the Remmers system recommendations.

## Tools / Cleaning



Epoxy roller, brush, surface brush or airless spraying equipment (e.g. Storch SL 1100 – piston stroke pump), suitable mixing equipment

More detailed information can be found in the Remmers Tool Programme.

Clean tools and remove any contamination immediately after use and while fresh using Thinner V 103.

Take suitable protective and waste disposal measures when cleaning.

## Storage / Shelf life





If stored unopened in the original container and kept cool, dry and protected from frost, min. 12 months (component A)/min. 24 months (component B).

## Safety data / Regulations

For professional users only!

For further information on the safety aspects of transporting, storing and handling the product and on disposal and environmental matters, please see the current Safety Data Sheet and the brochure entitled "Epoxy Resins in the Construction Industry and the Environment", issued by Deutsche Bauchemie e.V. (2nd edition 2009).

## **Technical Data Sheet** Product number 5590

## **Epoxy Universal**





Personal protective equipment	This information can be obtained from the current Safety Data Sheets and/or the relevant professional associations.		
	Respiratory protection with at least an A/P2 combination filter must be worn during spraying, together with safety goggles. Wear suitable protective gloves and clothing.		
Disposal	Larger quantities of leftover product should be disposed of in the original containers in accordance with the applicable regulations. Completely empty, clean containers should be recycled. Do not dispose of together with household waste. Do not allow to enter the sewage system. Do not empty into drains.		
VOC content as per the "Decopaint" Directive (2004/42/EC)	EU limit value for the product (Cat. A/j): max. 500 g/l (2010). This product contains < 500 g/l VOC.		

Please note that the data and information given above have been calculated as guidelines in the laboratory and from real-life experience and are therefore not binding as a basic principle.

This information is therefore of a general nature only and describes our products and how they are used and worked with. In this respect, it must be borne in mind that the varied and diverse nature of the

prevailing working conditions, materials used and construction sites encountered means that not every individual case can be covered. In this respect, we therefore recommend either conducting tests or liaising with us in the event of any doubt. Unless we have provided express written assurance of the products' specific suitability or characteristics in respect of a contractually stipulated intended use, any technical application-related advice or instruction will never

be binding, even though it is provided to the best of our knowledge. In all other respects, our general terms and conditions of sale and delivery shall apply.

When a new version of this Technical Data Sheet is published, it shall replace the previous version.