

An economical high-solids universal biobased two-component active anti-corrosion pigmented epoxy coating. As a primer or coating for blasted steel or galvanised steel.

As an anti-corrosion colour finish on at least Sa 2½ blasted steel. As a single-layer finish suitable for steel structures in slightly humid indoor climates. Due to its fast curing, it is resistant to mechanical stresses caused by transport and assembly work after a short time. 802BIO SteelKote EP has been specially developed to reduce the footprint (CO₂ equivalent) of the preservation project while maintaining the fast drying and corrosion protection properties and also gives a reduction of the exposure index regarding solvents (non carcinogenic). For blasted substrates, an RA value of 10-15 µm should be maintained.

- Biobased proportion: 20%; reduces CO₂ footprint by 1.1 kg per litre*.
- because of its high volume solids a low VOC share;
- on request, an extra opaque quality can be supplied, which gives a higher practical yield;
- spray-ready;
- can be used as a DTM "one-coat" system or as a primer/coating in epoxy systems;
- corrosion properties;
- for outdoor conditions a UV-resistant topcoat must be applied to prevent chalking.

* exact calculation of impact coating possible at project level, ask for the calculation tool

PROPERTIES

Gloss	Silky gloss
Gloss disclaimer	The final gloss level is partly determined by the structure of the substrate and the applied layer thickness and may in some cases deviate from the above values.
Colour	Standard colors (e.g. RAL, NCS)
Volume solids	ca. 68 vol.% (mixed product, depends on colour)
VOC	≤ 325 g/l
Density	At 20 °C ± 1.40 kg/l (mixed product)
Dry film thickness	Standard: 80-120 µm (depends on application process)
Theoretical coverage	At a dry film thickness of 80 µm: 8 m ² /l
Practical coverage	The performance in practice depends on various circumstances. As a guideline for airless spraying: For large dimensions: 70% of the theoretical coverage. For small dimensions: 50% of the theoretical coverage.
Packaging	20 litre cans and 200 litre drums. Thinner in 25 litre cans.
Shelf life	In original well shut packaging 12 months, stored inside at temperatures between 5 °C and 40 °C.
Heat resistance	Maximum 150 °C (dry load)
Activator	911V BIO
Thinner	5800BIO

PRE-TREATMENT

Steel cleanliness	Sa 2½ according to ISO 12944
Steel roughness	Blasting profile 40 – 70 µm (1.6 – 2.8 mils) or power tool cleaned to minimum ISO-St3 / SSPC SP3
Untreated steel	The surface needs to be pretreated according ISO12944 part 4 § 6.2.3. Remove grease, oil, dirt etc. using an appropriate cleansing agent, for instance ENVICLEAN PR (for use see product sheet) and a high pressure spraying pistol. Grit blasting to purity degree Sa 2½ in accordance with ISO 8501-1. After blasting remove all dust from the entire surface with compressed air which is free of moisture and grease. Apply first coating layer within 6 hours. In case the final coating layer is applied on the construction site, extra precautions need to be taken.
Hot dip galvanized	The surface needs to be pretreated according ISO12944 part 4 §6.2.3.4.1(sweep blast, with inert grit). See also NEN5254 for Duplex systems. Remove grease, oil, dirt etc. using an appropriate cleansing agent, for instance ENVICLEAN PR (for use see product sheet). Lightly blast the entire zinc surface with an inert blasting agent (grain size: 0.3 - 0.5 mm, blasting pressure: 2.0 - 2.5 bar, nozzle opening: 6 mm minimum). After blasting, the entire surface must have a uniform flat appearance. Depending on the zinc layer thickness, in accordance with NEN5254, max. 5 - 10 µm of zinc can be removed. After blasting remove all dust from the entire surface with compressed air which is free of moisture and grease. Apply first coating layer within 2 hours.

WORKING PROCESS

Mixture	802BIO Steelkote EP, 3 parts by volume. Activator 911V BIO, 1 part by volume.
Mixing instructions	Mix base component and activator intensively, preferably using a mechanical mixing device. The temperature of the mixed product should at least be 10 °C during application.
Potlife	At 20 °C 3 hours (mixed product)
Thinning	The paint can be applied without thinning with various spray equipment (18-23 °C). The necessary amount of 5800BIO depends on used equipment, application method and temperature of the mixed product.
Application conditions	The temperature of the substrate should be at least 3 °C above dew point. Keep application area well ventilated during application and drying, in order to reduce evaporated solvents. This is necessary to acquire good drying conditions and for the good of the applicators' health.
Application method	Preferably by means of airless or airmix spray equipment. When using brushes, a different film thickness and possibly inferior flow will be achieved.

PROCESSING DATA

	Airless spray	Airmix	Brush-roller	Airspray
Thinner	5800BIO	5800BIO	5800BIO	5800BIO
Amount	0-5 vol. %	0-10 vol. %	0-5 vol. %	5-10 vol. %
Nozzle	0.015 inch	0.015 inch	n.a.	2.0-2.5 mm
Flow pressure	140-160 bar	70-100 bar	n.a.	3-4 bar
Dry film thickness	60-140 µm	60-140 µm	80 µm	60-140 µm

Cleaning tools: Immediately after application using thinner 5800BIO.

DRYING TIMES

	10 °C	20 °C
Dust free	4 hours	2 hours
Manageable	12-16 hours	6-8 hours
Recoatable	16 hours	8 hours

Dry times with Activator 911V BIO at a standard dry film thickness of 80 µm. (method: BYK Drying recorder)

The maximum interval is unlimited, provided that the surface is clean and free of grease and/or oil. During drying and curing the relative humidity should remain under 80%. Furthermore, any contact with moisture must be avoided during this period. In case of water spillage during the curing cycle white spots may occur.

ENVIRONMENT AND HEALTH

Labelling	In accordance with EU directions 67/548/EEG and in accordance with directives on hazardous materials. See safety datasheet. Harmful and irritating in contact with skin, eyes and by inhalation. Do not inhale spray mist. In case of eye contact, immediately wash with large amounts of water and contact a medical expert. Do not eat, drink or smoke during application.
UN	1263

TOUCH UP

Touching up of damages or untreated parts at the construction site. Remove grease, oil, dirt etc. using an appropriate cleansing agent, for instance ENVICLEAN PR (for use see product sheet). Remove the rust from all mechanical damage caused by transport and mounting, untreated welding strips and welding spots and burns with rotating steel wire brushes, sanding discs or steel wire brushes and coarse sandpaper to purity degree St3, in accordance with ISO 8501-1. Smooth the transition of cleansed parts to parts with intact coats of paint by sanding and scraping.

After sanding, remove all dust from the entire surface with compressed air which is free of moisture and grease. Then touch up the object with the entire paint system, as described in this paint advice. Touch up light surface damages only with the product of the top coat, as described in the paint advice.

MAINTENANCE

It is recommended to clean the surface regularly and to inspect the coats of paint for defects annually. Touch up any defects with the original paint system. Regular cleaning of the surface is recommended. After the warranty period expires check surface for defects and touch-up as per original paint system.

TECHNICAL SUPPORT

Baril Coatings B.V. offers more than just advice. We offer a total service solution to the principal, the architect, the main contractor and the painting contractor. In order to ensure the required performance in terms of durability, Baril Coatings offers full technical support and supervision during implementation and completion of the application process, all in accordance with the ISO 12944 guideline.

The supervision and support provided by Baril Coatings does not relieve the painting contractor of his responsibility for the work carried out by him. The painting contractor must thoroughly familiarize himself with the most recently updated product data sheets and the general terms and conditions of Baril Coatings for protective coatings on steel. Baril Coatings is not responsible for application and the application conditions. The final durability depends mainly on factors that are outside our control and for that reason we cannot accept any liability.

PROTECTIVE COATINGS

Our 'protective coatings' excel by virtue of their durability, flexibility, adhesion, easy application, anti-corrosion, and chemical and mechanical resistance. This is the result of our vast competence in coating chemistry, combined with a good eye for our client's requirements and wishes. The coating systems conform to ISO 12944 and comply with international VOC guidelines.

WARRANTY AND DISCLAIMER

This Product Data Sheet supersedes those previously issued. Data, specifications, directions and recommendations given in this data sheet represent only test results or experience obtained under controlled or specially defined circumstances. Their accuracy, completeness or appropriateness under the actual conditions of any intended use of the Products herein must be determined exclusively by the Buyer and/or User. The Products are supplied and all technical assistance is given subject to our UNIFORM CONDITIONS OF SALE AND DELIVERY FOR PAINT, PRINTING INK AND OTHER PRODUCTS unless otherwise expressly agreed in writing. The Manufacturer and Seller disclaim, and Buyer and/or User waive all claims involving, any liability, including but not limited to negligence, except as expressed in said UNIFORM CONDITIONS for all results, injury or direct or consequential losses or damages arising from the use of the products as recommended above, on the overleaf or otherwise. Product data are subject to change without notice.
