

Technical document: TD-028, English translation

PRIMTEC 2K EPOX S200 Technical Specification and Application Manual

I Anti-Corrosive Primer

- Generic type:** PRIMTEC 2K EPOX S200 is an anti-corrosive coating for basic protection of steel structures, galvanized surfaces, aluminum and other metal surfaces. In the FIRESTOP system, it is used as a primer applied before an intumescent coating and in combination with epoxy and PU top coats.
- Description:** PRIMTEC 2K EPOX S200 is two component epoxy synthetic, anti-corrosive primer. It is made on the basis of epoxy resins dissolved in organic solvents, pigments and anti-corrosive additives. It is used both indoors and outdoors, on new structures and for the repair of the existing ones. It is available in oxide red and grey shades.
- Properties:**
- Excellent adhesiveness to metal surface and resistance to external atmospheric impacts.
 - Excellent corrosion protection.
 - Application by spraying – application with airless spray/ pump on the site or in the workshop prior to structure assembling or on existing construction.
 - Simple and quick repair of damaged layers of the coating that occurred during structure installation.
 - Long life in exploitation.
 - Enables good adhesion of the expanding fireproof coating to the metal surface.

II Physical and Chemical Data (Typical Values)

2.1. Details

Technical properties:

No.	Description	Recommended value
1.	Colour	oxide red, gray
2.	Viscosity	2000-4000 mPa*s, R3/30rpm
3.	Solid matter content	74-76%
4.	Density	1.40 (+/- 0.1)g/cm ² c. A 0.8-0.9 g/cm ³ c. B
5.	VOC content	≤490 g/l

III Base and Surface Preparation

3.1. Precautions:

Prior to the application of primer PRIMTEC 2K EPOX S200, it is necessary to do the following:

- Read the instruction before application.
- Equipment, tools and accessories needed for application should be clean, free of dried material residues.
- Surface should be dry, clean and degreased.
- Wet film thickness gauges should be at your disposal.

3.2. Surface preparation:

PRIMTEC 2K EPOX S200 is applied to a previously prepared, clean and dry metal surface. Preparation includes corrosion, dirt and grease removal using Motofus, nitro thinner or similar products and sandblasting according to ISO 8501-1 St 3/ Sa/ 2 ½.

The first layer of primer must be applied max 4 h after sandblasting.

The new constructions: must be cleaned, degreased and prepared according to previous instructions before application of PRIMTEC 2K EPOX S200.

Repair of existing constructions: includes removal of existing coating, dirt and grease, and also corrosion removal using chemical products or sandblasting – according to previous instructions.

For chemical treatment we recommend Motofus degreaser first, and subsequently anti-corrosive agents like Antikorizion. The formed patina must be removed with a cloth moistened with a degreaser or paint thinner, and after that PRIMTEC 2K EPOX S200 is applied.

IV Tools

These are general guidelines for product application. Site (working area) conditions may require some modifications of listed data in order to achieve desired results.

Mixer:

Use 1/2" boring machine with an average an instantaneous mixer.

Pumps – airless spray gun:

nozzle diameter – 0.013" to 0.015"

discharge pressure - 100-150 bar.

Spray guns:

nozzle diameter – 1.2-2.5.

Brush and Roller:

Application method recommended on smaller areas. For application with brush and roller, ensure a continuous coat to avoid thick brush finishing. Use of a small hairy roller will produce a light and lasting final layer.

Depending on the application method, a coating is applied in one or two layers.

V Mixing and Thinning

Mix well before use with a mixer, while observing the above listed instructions. The coating is prepared for use by mixing component A (epoxy resins) with component B (hardener) in a weight ratio of 6.5:1. The coating is diluted by the addition of 10% of PRIMTEC thinner EP. Pot life: 8 h.

VI Application Conditions

6.1. Temperature and atmospheric conditions:

It is recommended to apply and use PRIMTEC 2K EPOX S200 onto dry and protected steel profiles. Application temperature: 5°C to 35°C. Surface temperature: min. 3°C above the dew point. Relative air humidity should be below 80% for a successful application. If PRIMTEC 2K EPOX S200 gets wet during application, it may cause a number of problems such as damage to the coating layer, the inability of adhesion, etc. PRIMTEC 2K EPOX S200 should be protected from the rainfall and excessive humidity until it becomes completely dry.

6.2. Protection of Surrounding Surfaces:

Finished surfaces should be protected from damage and repeated spraying. Intumescent FIRESTOP coating can be applied after complete drying of PRIMTEC 2K EPOX S200.

VII Drying Time

The drying time of coatings depends on a number of factors. The values refer to the temperature conditions of 23°C and relative humidity of 70% max. Drying time can vary due to changes in temperature, humidity, air movement - ventilation, method of application of coatings, coating thickness, etc.

Dry - dust	30 min
Dry - touch	3-4 h
Interlayer interval	4 h
Dry - manipulation	24 h
Completely dry/cured	5-7 days

VIII Measurement of Coating Thickness

Dry film thickness (DFT) can be measured with gauging equipment such as electro-magnetic meter (dry film thickness gauge). Measurement of final thickness can be performed as soon as the coating is hard enough to enable reading without furrowing the surface. Optimal values DFT: 50-60 µm. For systems C4 and C5 (high corrosion protection) the recommended DFT of the coating is usually: 120-160 µm (two layers).

IX Consumption

4-5 m²/kg for 60 µm DFT. These values may vary due to wastage, i.e. method of application, conditions of dispensing equipment, the working conditions, preparation of metal surfaces, etc.

X Cleaning and Disposing

Wash wet brushes with thinner or Motofus degreaser. Do not spill liquid waste from cleaning and residual products into drains and waterways. Dispose of product residues and packaging in accordance with regulations.

XI Safety and Protection

Store and use away from sources of ignition, heat and oxidizing agents. Avoid contact with skin, eyes and respiratory organs. Use only in well-ventilated areas. Wear suitable protective clothing, respiratory mask and gloves.

Detailed information on the product classification, hazard statements and precautionary statements are listed in the Safety Data Sheet.

XII Packing, Handling and Storage

Packing: Metal cans, 26 kg + 4kg net, or on request.

Storage: Keep in the original tightly closed container and in a dry and well-ventilated place, at temperature: 5-35°C. Transport in upward position.

Product life: 24 months, if stored in recommended storage conditions and in the original packing.

XIII Transport and Regulatory Information

ADR/RID/IMDG/IATA: UN 1263 Paint; 3; III

XIV Conclusion

To our best knowledge, technical data contained herein are true and accurate as of the day of publishing and may not be modified without prior notification. User should contact FIRESTOP Internacional to check for accuracy before giving specification or order.

No warranty as to adequacy is neither given nor implied. We warrant the adequacy of our products according to

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XVI Signature



FIRESTOP Internacional d.o.o.
22330 Nova Pazova
G. Principa 20
MBR: 20921331
Tel: +381 22 321 030, +381 22 326 342
Fax: +381 22 325 002
support@internacional.rs
www.firestopinternacional.com

