

Technical document: TD-031, English translation

PRIMTEC 2K Shop primer Technical Specification and Application Manual

I Anti-Corrosive Primer

Generic type: PRIMTEC 2K Shop primer is an anti-corrosive shop primer for basic protection of steel structures, galvanized surfaces, aluminum and other metal surfaces. It is applied individually as a workshop coating, which can be welded. For permanent protection of metal surfaces, it is used in combination with appropriate alkyd, epoxy or polyurethane base coating and top coatings.

Description: PRIMTEC 2K Shop primer is two component epoxy synthetic, shop primer for temporary corrosion protection of new metal surfaces after sandblasting, as well as protection of metal elements during transport and storage. It is made on the basis of epoxy resins dissolved in organic solvents, pigments and zinc phosphate. It is used both indoors and outdoors, on new structures and for the repair of the existing ones. It is available in oxide red shade.

Properties:

- Good adhesiveness to metal surface and quick drying.
- 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 next layer of base coating.

II Physical and Chemical Data (Typical Values)

2.1. Details

Technical properties:

No.	Description	Recommended value
1.	Colour	oxide red
2.	Viscosity	1500-3000 mPa*s, R3/30rpm
3.	Solid matter content	56-58%
4.	Density	1.25 (+/- 0.1) g/cm ² c. A 0.87 (+/- 0.05) 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 Shop primer, 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 Shop primer 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 shop 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 Shop primer.

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 Shop primer 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.

Coating is applied in one layer.

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 5:1. The coating is diluted by the addition of up to 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 Shop primer 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 Shop primer 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 Shop primer 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 Shop primer.

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	5-15 min
Dry - touch	15-20 min
Completely dry	24 h

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 value DFT: 30 µm.

IX Consumption

12-15 m²/kg for 25 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, 20 kg + 4 kg 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 FIRESTOP Internacional quality control. We assume no liability for execution of works or injuries inflicted due to inadequate use. Our liability, if any, is limited to the substitution of products.

XV Date of Issue of this TD

19.02.2019.

(Basic document)

03.02.2020.

(Amendments)

Reference number: 122/2020

Reference number of basic document: 182/2019

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

