

Application Manual

Product description:

See Technical Data Sheet TRIOCOR ZINC 1700



TRIOCOR ZINC 1700

Epoxy zinc-filled coating

CONTENTS:

The Manual describes the surface preparation; the product preparation for the application; technical application process and equipment; storage conditions; occupational safety; fire precaution measures; environmental protection; first aid measures.

SURFACE PREPARATION:

The material is applied to a prepared and dry metal surface with a temperature of at least 3 ° C above the dew point. The preparation process includes the following operations: elimination of surface defects to P2 according to ISO 8501-3; degreasing the surface (if necessary); Surface cleaning to the degree Sa 2^{1/2} in accordance with GOST R ISO 8501-1-2014 with a recommended roughness profile of 50-75 µm, if maintenance clean damaged areas thoroughly to minimum P St 3, desalination of the surface (if necessary), dust removal of the surface to a degree of 2 with a particle size of not more than 2 classes in accordance with ISO 8502-3 .

PREPARATION FOR THE APPLICATION:

Material is supplied in containers: base - 10 liters, hardener - 3 liters.

After opening the container, the base and hardener must be mixed separately before application. Mix in a 4: 1 ratio (base: hardener) by volume, mix thoroughly until smooth.

TRIOCOR ZINC 1700 - a two-component epoxy primer with a high zinc content with a volume solids - 62 ± 5%.

APPLICATION:

Application method: Airless spraying / Manual application.

Thinner: Thinner TRIOSOLV 0002 (if necessary), up to 5% by volume with airless spraying. For more information, contact O3-Coatings.

Diameter of the nozzle (recommended): .009 "- .017"

Operating pressure (recommended): (120-160) bar.

Equipment flushing: Thinner TRIOSOLV 0002

Recommended application conditions:

- air temperature is at least minus 10 ° C;
- relative air humidity is not higher than 85%;
- the temperature of the surface to be painted is at least 3 ° C above the dewpoint;
- lack of direct precipitation.

IMPORTANT: Work is prohibited if the above parameters do not match the required parameters.

Before every work shift begins and every 4 (four) hours, it is recommended to check and fix the following parameters:

- environmental conditions (air temperature, relative humidity);
- dew point temperature;
- Surface temperature;
- absence of moisture and oil contamination on the surface;
- No dust on the surface.

Before starting the application of the material, pass through the painting apparatus a solvent for cleaning the equipment from the previously used paintwork materials. The solvent directly depends on the type of materials used previously. It is recommended to clean the equipment also at the end of the work shift.

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Apply the material by airless spraying; can be applied by brush or roller when applied in hard-to-reach areas or on small surfaces.

When applied by airless spraying, the recommended wet film thickness (WFT) per pass is 97 mkm, which corresponds to a dry film thickness (DFT) of 60 mkm

The drying time for a dry film thickness of **TRIOCOR ZINC 1700** 60 mkm is given in Table 1.

Table 1

| The temperature of the surface to be painted | 0 °C | 5 °C | 10 °C | 15 °C | 20 °C | 25 °C | 30 °C | 35 °C |
|--|--------|--------|--------|--------|--------|-------|-------|-------|
| Drying to a tack-free | 35 min | 15 min | 14 min | 12 min | 10 min | 9 min | 7 min | 5 min |
| Dry before applying the next coat: | | | | | | | | |
| TRIOCOR MASTIC 4500 | 8 h | 4 h | 3 h | 2,5 h | 2 h | 1,5 h | 1 h | 0,5 h |

The drying time is determined by the actual TSP. The drying times given in this section are of a recommendation nature. When assessing the actual drying time, it is also necessary to take into account the presence of air currents and the relative humidity of the air.

Control of the thickness of the wet layer is carried out by the "comb" on the last tooth, touching the paint. Above each comb tooth is the size of its clearance in microns from the "basic" teeth (from 0).

When performing measurements, the comb must be installed perpendicular to the plane of the painted surface. After each measurement, the surface of the "comb", in contact with the paint, must be thoroughly wiped with a clean rag.

The thickness of the wet coating layer should be fixed.

Quality control of the finished coating is carried out according to the following characteristics:

- appearance (there should be no streaks, cracking, peeling, etc.) - homogeneous coating of gray color;
- the thickness of the dry film is determined by rule 80-20:

80% of the measured thickness should be at least the thickness specified in the specification - (nominal thickness), 20% of the measured thickness should be at least 80% of the nominal thickness.

IMPORTANT: Do not apply the next coat until the appropriate thickness of the coating is achieved.

To measure the thickness of the dry coating film, thickness gauges with a measuring range of 0 to 5000 mkm are recommended.

STORAGE CONDITIONS:

Material **TRIOCOR ZINC 1700** is recommended to be stored in a well-ventilated dry room at a temperature of 0 °C to + 30 °C in a hermetic factory package, in a closed environment, and avoid direct exposure to UV rays.

The shelf life of the **TRIOCOR ZINC 1700** is 18 months, subject to storage conditions. The material should be used within the manufacturer's recommended shelf life. The decision on the use of material with a shelf life of more than 18 months is taken by the commission.

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OCCUPATIONAL SAFETY:

General rules:

In the production of works must comply with the requirements of GOST 12.3.002, GOST 12.3.005, GOST 12.3.016, POT R M-017.

Hazardous and harmful production factors must be eliminated or reduced to acceptable levels.

When organizing and performing painting work, it is necessary to provide physiologically justified modes of work and rest.

Qualification requirements:

The application of the corrosion resistant coating can be conducted only by adults who are at least 18 years old that have undertaken:

- Safety training in accordance with GOST 12.0.004, industrial sanitation, fire and electrical safety;
- professional preparation.

The executive officers are held responsible for complying with the occupational and industrial safety requirements when conducting the application works, in accordance with the requirements of SNiP 12-03 and SNiP 12-04.

Workers must know about:

- hazards, harmful occupational factors, harmful substances in the materials that affect the air in the workplace and how they can affect the human body;
- application instructions and procedures, and requirements for the workplace maintenance;
- workplace safety guidelines, fire safety, industrial health;
- personal hygiene requirements;
- requirements for using personal protective equipment (PPE);
- first aid procedures.

Safety requirements for preparing and painting surfaces:

All works related to the use of paintwork materials in the premises should be carried out with the general exchange of supply and exhaust and local exhaust ventilation in accordance with GOST 12.4.021. Ventilation should ensure the content of harmful substances in the air of the working area, not exceeding the maximum permissible concentrations in accordance with the requirements of GOST 12.1.005, GN 2.2.5.3532.

Workers engaged in degreasing the surface, preparing and applying paintwork materials should be provided with the following personal protective equipment:

- disposable or reusable protective suit for painting which has zipper runs for length of the product, elastics at wrists, ankles and at the waist, and hood;
- rubber technical gloves according to GOST 20010-93;
- safety glasses according to GOST 12.4.253-2013 (EN 166:2002), symbol 3 or similar which has similar functional purpose;
- filter respirators which have isolating front part in form of half-mask according to GOST 12.4.296-2015 equipped with combined filter, which provides the protection from gases, vapors and aerosols according to GOST 12.4.235-2012 AZRZ (brown-white), AHRZ or similar which has similar functional purpose;
- shoes made from leather which has solid toes to avoid the injury of feet in case of the fall of a heavy object; sole must be protected with the metal plate.

IMPORTANT: Working without using the PPE is forbidden!

Storage of organic solvents in the workplace is allowed in hermetically sealed containers in an amount not exceeding two-shift rate.

When working with solvents, observe the following safety requirements:

- use respiratory equipment and eyes;
 - work with the included ventilation system, which ensures air exchange of the required multiplicity.
- When preparing the surface, workers conducting abrasive blasting must wear protective suits made from dust-proof material and helmets MIOT-49 type, use respirators PRB-5 with forced air supply.

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Requirements for handling toxic substances:

Epoxy primer **TRIOCOR ZINC 1700** is produced in accordance with TU 2312-005-20654749-2015 and is recommended for use for corrosion protection of steel structures for various purposes by industrial facilities, oil and gas sector and infrastructure, operated in atmospheric environments corrosion category C5 (ISO 12944-2).

The container in which the **TRIOCOR ZINC 1700** epoxy primer is located must have a label with the exact name and designation of the material contained therein. The container must be intact and have a tight-fitting lid.

If the spill is accidentally spilled, cover the strait with sawdust or sand, before protecting the respiratory system. Polluted solvents, sawdust, sand, rags and rags should be collected in buckets and removed to specially designated places in accordance with the requirements of GOST 30772, GOST R 52107.

Eating and smoking are allowed only in specially designated places.

FIRE PRECAUTION MEASURES:

Fire precaution measures during coating application works must be carried out in accordance with the technical regulations related to fire safety requirements (July 22, 2008 №123-FZ) and other regulatory documents.

The coating materials are considered to be fire-hazardous, therefore, fire precaution measures in accordance with GOST 12.1.004 and Resolution №390 "Rules of the Fire Fighting Regime in the Russian Federation" are carried out at the workplace.

IMPORTANT: Do not use water to extinguish fires.

When preparing the surface for coating application and when applying coating, it is prohibited:

- to smoke, make a fire, conduct welding within a radius of 25 m from the workplace and along the vertical line below and above the area;
- to heat the production facilities and protected objects with electrical appliances in a conventional way.

In the event of a fire, evacuate all people from the area, report the fire to the fire service, remove coating materials from the workplace, and proceed to extinguish the fire with the available means in strict accordance with the approved plan.

ENVIRONMENTAL PROTECTION:

Coating application produces solid and liquid waste described in **Table 2**.

Table 2

| Type of waste | Method of waste management |
|---|--|
| <u>Solid waste:</u> Packaging of the product – Containers | The packaging can be disposed of as domestic waste. Containers can be reused for technical purposes after the product remaining on the inner walls of the container has dried. |
| <u>Liquid waste:</u> - Thinner / flushing liquid for cleaning the painting sprayer - Remains of the product | The waste is disposed of by the product user in accordance with GOST 30772, GOST R 52107 |

FIRST AID MEASURES:

General information:

In the case of a suspected poisoning, seek medical help.

After inhalation:

In the case of inhalation of the product, take the affected person to fresh air, keep them at rest and seek medical help.

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After eye contact: In the case of an eye contact with the product, flush the eyes with a lot of clean running water and seek medical help.

After skin contact: In the case of skin contact, remove contaminated clothes and thoroughly clean the area of contact with soap and water. Do not use thinners or diluents.

After swallowing: In case of swallowing, keep the affected person at rest and immediately seek medical help.

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| IMPORTANT: Do not induce vomiting. |
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