

Description

Double-packed ethyl silicate zinc-containing shop-primer. It is applied directly to metal, providing anticorrosive protection of structures for up to 1 year in an open industrial atmosphere for the storage period between manufacturing and installation operations. Can be used on an automatic painting line.

Recommended use

Anticorrosive protection of steel workpieces surfaces, parts, assembly units for the storage period of all macroclimatic regions, types of atmosphere and categories of placement according to GOST 15150 or for all categories of atmospheric corrosivity according to ISO 12944-2. Single layer coating does not affect the quality of the weld.

Can be overlapped with materials of various nature: epoxy, polyurethane, vinyl, chlorinated rubber, acrylic after secondary surface preparation.

Certificates, Approvals

Approved by the testing center LLC SPA Coating industry, Khotkovo.

Type approval certificate of Russian Maritime Register of Shipping №20.07913.120 as a shop-primer for steel sheets and structures with the possibility of welding.

Complies with IMO MSC.215(82) as a shop primer in ballast tank systems.

Technical data

Color of coating	red-brown
Finish	matt
Density, g/cm ³	1.25
Pot life at 20 °C, h	24
Drying time to 1 degree (GOST 19007) at 20 °C, minutes	5, not more than
Dry film thickness, µm	15-25
Wet film thickness, µm	75-120
Theoretical spreading rate of one-layer coating, g/m ²	90-150
Solids	
- by volume, % (volume)	21
- by mass, % (mass)	40-50

Note: Film thickness is measured on a smooth surface of a test panel

Surface preparation

- degrease the metal surface to the first degree according to GOST 9.402;
- abrasive blast cleaning from scale, rust or traces of old paint to degree 2 according to GOST 9.402 or Sa 2 ½ or Sa 3 (ISO 8501-1); with a sharp-edged surface profile with roughness 25-60 µm (segment 1 to 2 of comparator G ISO 8503-1)
- remove dust.

Before applying the main layer of anti-corrosion protection primer coating ZVES-SP must be free from dirt, grease and dust.

Application

- before use, stir component A to a homogeneous state;
- with constant stirring add component B to component A in the ratio indicated on the label, mix thoroughly; dilute to working viscosity if necessary.

The ratio of components A and component B, respectively: by volume 2:1, by mass 1.15:1.

The application process requires constant recirculation of the primer through the supply system. For long breaks in work, it is recommended to get rid of the previously mixed soil and use a freshly prepared mixture.

The pot life of the ZVES-SP (after mixing the components) at an ambient temperature of (20±0.5) °C is at least 24 hours (when organizing painting work, one should take into account the decrease in spreadable life with increasing temperature).

It is recommended to apply ZVES-SP in one layer using automatic spray, conventional and airless spray, brush, roller at ambient temperature from 0 to plus 40 ° C and relative air humidity up to 85 %. The curing of the coating is slowed down at a relative humidity of less than 50 %.

The temperature of the surface to be painted must be at least 3 ° C above the dew point. When painting at low temperatures, the temperature of the primer must be at least 15 ° C.

Recommended paint system: ZVES-SP 1 coat, 15-25 µm (dry film thickness measured on a smooth surface of a test panel)

ZVES-SP is recommended to be applied without dilution. If necessary, bring to working viscosity solvent SOLV-ES.

Application methods:

Airless spray

Recommended thinner SOLV-ES (TS 2319-080-12288779-2009)
Quantity up to 5% by mass
Pressure 10 - 15 MPa (100 - 150 bar)
Nozzle diameter 0,013"-0,023"

Conventional (air) spray

Recommended thinner SOLV-ES
Quantity up to 10% by mass
Pressure 0,2 - 0,4 MPa (2 - 4 bar)
Nozzle diameter 1,8 - 2,2 mm

Brush/roller

for small areas, for touch-up painting
Recommended thinner SOLV-ES
Quantity up to 5% by mass

Equipment cleaning

SOLV-ES

Curing time of ZVES-SP at a dry film thickness of up to 30 microns

Surface temperature	0 °C	10 °C	20 °C	30 °C	40 °C
Touch dry	20 min	10 min	5 min	2 min	40 s
Dry to handle	40 min	25 min	15 min	6 min	2 min

The specified curing time is recommended to be taken as a relative for practical painting. The curing time depends on the temperature of the surface and the ambient air and the relative air humidity.

The maximum overlapping interval is not limited.

During the subsequent application of the design coating system, the primer surface should, if necessary, be degreased to the first degree according to GOST 9.402, in the presence of traces of corrosion and other defects, local cleaning shall be carried out to P Sa 2 ½ (ISO 8501-1). Thorough local cleaning with hand and power tools to P St 2 in hard-to-reach places (ISO 8501-2) is allowed. Remove dust.

Storage and handling

ZFES-SP is supplied as a set: Component A, packed in metal buckets with a capacity of 20 liters, and Component B, packed in cans with a capacity of 15 liters.

Storage conditions – according to GOST 9980.5 (at ambient temperatures from minus 40 to plus 30 ° C). During storage, containers with primer components shall be stored away from heat sources, the container shall be protected from direct sunlight and atmospheric condensation.

The guaranteed shelf life of Component A - 12 months, Component B - 6 months starting with the manufacture date.

Precautions

When working with ZFES-SP, one shall observe the existing sectoral standard norms and requirements and safety measures as specified on the package label.

When handling, comply with applicable industry codes and requirements, as well as precautions indicated on the container label.

One shall use personal protective equipment (goggles, face masks and respirators) and avoid inhalation of thinners and contact of the composition or its components with skin, eye mucosa, respiratory channels; use inside the premises is allowed only in case sufficient ventilation is provided.

ZFES-SP and its components (Component A and Component B) are fire-hazardous!

The information is of general character, without consideration to the object specific nature and it is recommended to be read with the Operating Procedure. Use of materials for other purposes not specified here or in case other influencing factors are present shall be approved by the VMP Holding CJSC in writing. In case of absence of such approval the manufacturer is not held liable for the improper use of the material and the buyer falls from the right to present claims connected with the coating quality.



VMP RESEARCH & PRODUCTION HOLDING CJSC

Ekaterinburg +7 (343) 357-30-97; 385-79-00; 385-66-10, office@fmp.ru

Moscow +7 (495) 411-65-03; 411-65-04, msk@fmp.ru

Saint Petersburg +7 (812) 640-55-20, spb@fmp.ru

For representation offices of the "VMP" in Russia and abroad: vmp-holding.com