Application Manual

Product description:
See Technical Data Sheet TRIOTEMP 600

TRIOTEMP 600

Silicone-acrylic 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 the prepared and dry metal surface with temperature 3°C above the dew point. The preparation process includes the following operations: elimination of surface defects to P2 ISO 8501-3; degreasing surface (if necessary; recommended solvent – P 4); surface cleaning to the extent Sa 2 1/2 according to GOST R ISO 8501-1-2014 cleaning of the surface to the degree Sa $2^1/_2$ according to GOST R ISO 8501-1-2014 with a recommended roughness profile of 25-50 μm; during repair local cleaning P St 3 is allowed, and surface desalination (if necessary); Dust removal of the surface to a power of 2 with a particle size of not more than 2 classes according to ISO 8502-3.

When the material is applied to a painted surface, the typical surface preparation process is determined by the state of the surface of the previous layer.

Compatibility with other coatings:
The previous layer is a zinc silicate coating, a silicone-acrylic coating;
The subsequent layer is a silicone-acrylic coating.

The surface of the previous layer must be clean, free from contamination, dust, uniform and even before applying the material. Remove contamination by drinking water under a pressure of 35 MPa, remove oil and grease contamination by GOST 9.402 - 2004.
In the event that there are damages, defects, chips on the surface of the previous layer, it is necessary to restore it in accordance with the technology approved by the manufacturer of the applied material.

The application of the material is carried out on a dry, clean primed surface after its preparation. The interval between preparation of the surface and application of the material is determined by the environmental conditions and the characteristics of the materials used, in accordance with the manufacturer's recommendations.

In case of direct exposure to atmospheric precipitations, the surface should dry completely and repeat the procedure for its preparation.

Do not allow the application of the material if the overlapping of the material of the previous layer is exceeded, in accordance with the recommendations of the manufacturer of the applied material. If the overlap interval is exceeded, then to ensure the interlayer adhesion of the anticorrosion coating to the material of the previous layer, it is necessary to impart a roughness to the surface by performing sweeping (light abrasive blasting, carried out at an angle of 30 ° to the surface to be cleaned and a pressure of ½ from the working surface) before applying an anticorrosive material.

PREPARATION FOR THE APPLICATION:

TRIOTEMP 600 is a one-component silicone-acrylic coating, pigmented with aluminum, using TRIOSOLV 0003 thinner.

The material is supplied in 5- or 10-liter containers.

The material is one-component, requires careful mixing before application.

APPLICATION:

Brush, paint brush, airless spraying.
Thinner TRIOSOLV 0003.
For more information, please contact the company LLC"O3-coutings".

Diameter of the nozzle (recommended): .015”-.017”

Operating pressure (recommended): Not less than 100 bar.

Cleaning of tools: thinner TRIOSOLV 0003 (it is possible to use other thinners approved by the company LLC "O3-coatings").
Recommended application conditions:
* air temperature should be at least plus 5°C;
* air humidity should be at least 85%;

IMPORTANT: it is forbidden to perform works in case of non-compliance of the parameters with the required.

Before starting each work shift, it is recommended to check and record 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 applying the material, let the thinner through the painting machine for cleaning equipment from previously used coatings. The thinner depends on the type of the previously used material. It is recommended to clean the equipment in the end of every work shift.

The material is applied by airless spraying; it can be applied with a brush or a roller when applying the material in hardly accessible places or small surfaces.

When applied by airless spraying, the recommended thickness of a wet film (TMP) is 50 - 75 microns, which corresponds to a dry film thickness (TSP) of 20-30 microns.

Drying time of the material TRIOTEM 600 for 20 – 30 microns DFT is the following.

Table 1

Drying time for 20-30 microns				
Substrate temperature	5°C	10°C	23°C	40°C
Drying to tack	1 h	45 min.	30 min.	15 min.
Drying before applying the next coat	8 h	5 h	4 h	3 h

The drying time is determined by the actual WFT. 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.

The control of the wet layer thickness is carried out by the "comb" on the last tooth that touches the layer. Over each tooth of the comb there is the value of its gap in microns from the "basic" teeth (from 0).
While measuring, the comb must be set perpendicular to the plane of the painted surface. After each measurement, the surface of the "comb», that's been in contact with the paint must be carefully wiped with a clean cloth.

The thickness of the wet coating layer must be fixed.

Quality control of the finished coating is performed according to the following characteristics:
* appearance (no drips, cracking, peeling, etc.) – uniform grey coating;
• DFT is determined by the 80-20 rule:
80% of the measured thickness must be at least the thickness specified in the specification (nominal thickness), 20% of the measured thickness shall not be less than 80% of the nominal

thicknesses.

IMPORTANT: do not allow the next layer to be applied until the desired coating thickness is reached.
To measure the thickness of the dry coating film it is recommended to use a thickness range measurements from 0 to 5000 microns.

STORAGE CONDITIONS:

It is recommended to store **TRIOTEMP 600** in a dry, dark place at a temperature of plus 5 °C to plus 30 °C in the sealed factory packaging in a cool place with no direct exposure to UV rays and other heat sources.

The shelf life of **TRIOTEMP 600** is 24 months, subject to storage conditions. The material should be used within the manufacturer's recommended shelf life. The decision on the use of a material with a shelf life of more than 24 months is taken by the commission

OCCUPATIONAL SAFETY:

General rules:

Works is carried out in accordance with the requirements of GOST 12.3.002, GOST 12.3.005, GOST 12.3.016, POT R M-017.
Occupational hazards and harmful should be eliminated or reduced to acceptable levels.
When organizing and carrying out painting works, a physiologically justified work-rest schedule should be provided.

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:

• training in occupational safety - according to GOST 12.0.004, industrial sanitation, fire and electrical safety;
• vocational training.

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 2.2.5.1313.

Workers engaged in degreasing the surface, preparing and applying paintwork materials should be provided with the following PPE: special protective clothing, rubber gloves in accordance with GOST 20010-93, safety glasses according to GOST R 12.4.230.1, filter respirator RPG-67 (A) according to GOST 12.4 .004.

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, PRM-62 with forced air supply.

Requirements for handling toxic substances:

Material TRIOTEMP 600 is produced in accordance with TU 20.30.12-115-40141638-2018 and is recommended for use in the anticorrosion protection of various engineering structures, facilities, civil and industrial construction structures
Material TRIOTEMP 600 is produced in accordance with the technical documentation of the manufacturer 20.30.12-115-40141638-2018 and is recommended for use for anti-corrosion protection of various engineering structures, facilities, building structures for civil and industrial use.

The package of TRIOTERM 600 must have a label with the exact name and designation of the contained material. The container must be intact and should have a tight-fitting lid.

In case of accidental spillage of paint, this place should be filled with sawdust or sand, but at first the worker should protect the respiratory system. Contaminated thinners, sawdust, sand, rags, rags should be collected in buckets and removed in specially designated areas in accordance with the requirements of GOST 30772, GOST 30773, GOST 30774, GOST R 52107.

Eating and Smoking are allowed only in designated areas.

FIRE PRECAUTION MEASURES:

Fire-fighting measures during the painting workЫ should be carried out in accordance with with technical regulations on fire safety requirements (from July 22, 2008 № 123-FZ) and
other normative documents.
The applied paints and varnishes belong to fire-hazardous materials, so fire-fighting measures are carried out in accordance with the requirements of GOST
12.1.004 and Decree № 390 "Rules of fire safety in the Russian Federation".

IMPORTANT: do not use water to extinguish a fire.
When carrying out works on preparation of a surface for coloring and painting works it is not allowed:

* to smoke, to make fire, to conduct welding work within a radius of 25 m from the place of work, and also across the vertical in the area;
* to heat production facilities and protected objects with electrical appliances in the usual performance.

In case of fire should people should leave the danger zone, it must be reported about the fire to the fire service, it is also needed to remove paint and varnish materials from the working area, to start fire extinguishing with the help of the available funds 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
Solid waste: 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.
Liquid waste: - 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.

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.

IMPORTANT: Do not induce vomiting.