



**TERMION**  
Innovative coatings

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## Instructions for the application and use of ultra-thin thermal insulation coating **TERMION VOLCANO**

Scope of application of the "Termion Volcano" modification:

Insulation of heat pipelines, process pipelines, gas pipelines, metal chimneys, engine parts, hulls and mechanisms of ships exposed during installation and operation to temperatures from -60 to + 600 ° C and to aggressive factors: mineral oil, oil products, salts.

Treatment of this thermal paint metal surfaces will get rid of corrosion, and equipment with a high temperature - from getting the operating personnel of thermal injuries.

The material has the following characteristics:

- conditional viscosity of 25 seconds or more at 20 ° C; reaching a working viscosity of 15s. 50-80% or more; (viscometer VZ-246, nozzle with a diameter of 4 mm, temperature 18-22 ° C); non-volatile substances make up 75% or more;
- material adhesion up to 1 point (cross-cut method);
- the film of the solution is resistant to salt fog for 96 hours or more; to moisture - from 150 h; to static influence min. oil and gasoline - 2 days or more, water - more than 100 hours;
- ultimate strength during impact from 40cm (U-2 device);
- complete drying of the layer (III degree) from +18 to 22 ° C, time - up to 2 hours, at +148 to 150 ° C - up to 30 min;
- 1 layer of this modification is able to withstand the boundary temperature (+ 600 ° C) for at least 3 hours.

### Insulation works:

#### 1) Preparation of liquid thermal insulation "Termion Volcano"

Immediately before carrying out the work, it is necessary to stir the "Termion Volcano", since the material may stratify into fractions during storage.

It is necessary to stir manually for 7-10 minutes, a construction mixer or paddle nozzles with a drill are also used for mixing, the maximum rotation speed should not be higher than 150-200 rpm.

If necessary, the material can be diluted (no more than 10% by volume) with orthoxylene, xylene or a high-quality solvent.

**The material is diluted (if necessary) only after mixing until smooth!**

**The material does not need to be thinned for airless spray application!**

#### 2) Instruments

For thermal insulation of small areas or structures with a complex configuration, it is more convenient to use soft flute brushes.

Perform thermal insulation of structures or areas with a total area of 100 m<sup>2</sup> more efficiently with airless spray. For flat surfaces, rollers of various sizes can be used.

### 3) *Execution of works*

Application of "Termion Volcano" is carried out on a dried surface (previously cleaned of old paint and degreased with appropriate solutions).

The temperature of the air and the base must be between + 5 ° C and + 40 ° C.

When applied with a brush, the material is applied in one pass (otherwise the microsphere will begin to roll into lumps)

Metal surfaces are painted in 2-3 cross layers with intermediate drying between layers (until tack) 0.5-2.0 hours depending on the ambient temperature.

Drying of coatings is natural at a temperature of  $(20 \pm 2) ^\circ \text{C}$  for no more than 2 hours; during operation, complete curing occurs when heated.

The thickness of the dried coating on the surface is determined by the thermal calculation method.

For one layer 1 mm thick, with an area of 1 m<sup>2</sup>, you will need 1.25 liters of liquid thermal insulation.

#### **Material storage:**

It is recommended to store "Termion Volcano" in a well-closed original container indoors at temperatures from -20 ° C to + 30 ° C

#### **ATTENTION!**

- Use personal protective equipment: glasses, gloves, special clothing, respirator.
- If the chemical comes into contact with the skin, eyes, or the respiratory tract, flush with plenty of water (if possible) and seek medical attention if necessary.