



BRONYA THERMOHYDROPLAST

Bronya ThermoHydroPlast is a high-quality rubber coating with waterproofing and thermal insulation properties. Protects the surface from water and chemical exposure. A light-resistant, liquid, one-component composition based on a synthetic rubber polymer with the addition of solvents, functional additives and hollow microspheres, designed for waterproofing and thermal insulation of various surfaces. Designed for application at negative ambient temperatures from -25 °C to +35 °C.



Designed for thermal insulation and waterproofing of external and internal surfaces of enclosing structures of buildings and structures, foundations, roofs, pipelines, tanks, ducts, chimneys, industrial equipment, marine and river vessels, transport hulls for various purposes, containers, tanks and reservoirs, including non-absorbent surfaces or surfaces with low absorbency - plastic, polymer materials: polyethylene (PE), polyvinyl chloride (PVC), polypropylene (PP), non-ferrous metals, dense concrete and other surfaces.

A durable weather-resistant coating designed for **use in conditions of constant contact with water**, aggressive media, including "salt mist".

The operating temperature of the Bronya ThermoHydroPlast modification ranges from -55 °C to +120 °C.

APPLICATION

- ▶ inter-panel seams
- ▶ car wash and prom. boxes
- ▶ wagons, containers
- ▶ substations, gas tanks
- ▶ roofs, terraces, canopies
- ▶ transport, wagons, ships
- ▶ tanks, reservoirs
- ▶ bridges, overpasses, towers

DESIGNED FOR WATERPROOFING, THERMAL INSULATION, PROTECTION AND PROLONGATION OF THE SERVICE LIFE OF ALL TYPES OF MATERIALS:

- ▶ plastic
- ▶ tree
- ▶ brick
- ▶ drywall
- ▶ bitumen roll with sprinkling and mastic smooth substrates
- ▶ flat, pitched and domed roof structures
- ▶ galvanized and black metal
- ▶ concrete
- ▶ plaster
- ▶ slate
- ▶ EPDM, PVC and TPO single-layer membranes
- ▶ and other surfaces for external and internal application

Bronya ThermoHydroPlast provides super protection against moisture penetration and all weather conditions.

This paint serves as the upper reflective layer. After complete drying and polymerization, the Bronya ThermoHydroPlast forms a seamless, rubber-like, waterproof membrane. The special formula provides high strength, elasticity, resistance to fungus and mold, as well as resistance to extreme weather conditions and ultraviolet radiation.

KEY ADVANTAGES

- ▶ **drying speed** – 20 minutes before "sticking" – at (20 ± 3) °C, complete drying 5-7 hours at (20 ± 3) °C
- ▶ simultaneously provides waterproofing and thermal protection of structures
- ▶ **it is possible to apply, including on non-absorbent surfaces or surfaces with low absorbency - plastic, polymer materials:** polyethylene (PE), polyvinyl chloride (PVC), polypropylene (PP), non-ferrous metals, dense concrete and other surfaces
- ▶ can be in constant contact with water and aggressive environments, including "salt fog" and on the "first coastline"
- ▶ does not increase the load on the foundation and other building structures
- ▶ high elasticity and crack resistance, including at low temperatures
- ▶ does not contain organic solvents, odorless, non-flammable, environmentally friendly
- ▶ **all-weather application:** from -25 °C to +35 °C
- ▶ **compatible with any surfaces:** wood, concrete, brick, plaster, drywall, slate and others
- ▶ in places of constant humidity, it is able to carry thermal insulation, eliminate condensation, including on highly plastic, plastic, glossy polycarbonates (with the necessary base for application, see the instructions)
- ▶ forms a continuous coating of the object with the elimination of "cold bridges" and absolute water impermeability
- ▶ it is characterized by high durability and weather resistance, to frost extremes, constant exposure to direct sunlight, including constant frost extremes and constant exposure to direct sunlight
- ▶ resistance to the formation of fungus, mold and algae fouling
- ▶ the warranty period is 25 years

ADVANTAGES OVER ANALOGUES

Rubber coatings based on organic solvent of the Bronya ThermoHydroPlast series, due to high all-weather properties, waterproofing, thermal insulation, chemical durability, as well as elasticity and versatility of application – **have no analogues in price / quality.**

PROTECTIVE PROPERTIES BRONYA THERMOHYDROPLAST

It has all-weather protective properties. It is resistant to chemical and mechanical influences (impacts and chips). It has the property of “self–healing” - **with light impacts, due to its hyperplasticity, the surface itself is restored.**

AREAS OF APPLICATION BRONYA THERMOHYDROPLAST:

Bronya ThermoHydroPlast is irreplaceable for surfaces that need to be both thermally insulated or condensate eliminated, and to make them resistant to water, as well as to chemical and mechanical influences. It is indispensable for application where it is important not to increase the thickness of hydro-thermal insulation.

APPLICATION EXAMPLES:



Plastic and metal pipes, tanks, tanks, structures, for the purpose of thermal insulation or elimination of condensation, as well as protection from atmospheric influences and ultraviolet



Hard-to-reach places, for example:

- water valves
- air ducts



Floors before installing underfloor heating



Bathrooms, showers, toilets, swimming pools, where additional waterproofing is needed for thermal insulation



Walls, floors inside and outside the premises (both residential and basement)



Balconies, loggias, window and door slopes

DETAILED SPECIFICATIONS:

- ▶ **Base material:** synthetic rubber
- ▶ **Density** kg/m³, 600±10%
- ▶ **Viscosity**, 20C Pa·s (Pa*s) – 16
- ▶ **Tensile strength** – 148 kgf/cm²
- ▶ **Adhesion to metal**, MPa – 2.3
- ▶ **Adhesion** (DIN ISO 2409) – G0
- ▶ **Vapor permeability** – 0.8 g/m²/h
- ▶ **Swelling from water** 20°C, 168h – 0%
- ▶ **Operating temperature**, Celsius, from -55°C to +150°C
- ▶ **Mass fraction of non-volatile substances**, % 50
- ▶ **Drying time before "sticking"** – at (20 ±3)°C, min 20 – 30
- ▶ **Initial tensile strength** at 20 °C – 36 kgf/cm²
- ▶ **Adhesion to concrete**, MPa – 2.5
- ▶ **Adhesion to plastic**, MPa – 1.3
- ▶ **Film resistance to static water exposure**, at t = (20 ±2) °C, h, not less than 168
- ▶ **Elasticity**, % – 350
- ▶ **Frost resistance**, up to – 55 °C
- ▶ **Storage temperature** from -35°C to +35°C

MANUAL FOR APPLYING THERMAL INSULATION WATERPROOFING COATING BRONYA THERMOHYDROPLAST

Bronya ThermoHydroPlast is a light-resistant, liquid, one-component composition based on a synthetic rubber polymer with the addition of solvents, functional additives and hollow microspheres, designed for waterproofing and thermal insulation of various surfaces.

Bronya ThermoHydroPlast is designed for use at **negative ambient temperatures from -25 °C to +35 °C**. The material can be used for hydro and thermal insulation of both enclosing structures of buildings, structures, and pipes, tanks and other objects. The operating temperature of the Bronya ThermoHydroPlast **modification ranges from -55 °C to +150 °C**.

■ 1.Surface preparation

The insulated surface must be cleaned of dirt, rust, dust, old paint, remove crumbling elements, etc. In the presence of oily and greasy elements, it must be removed with a degreaser, or with xylene solvent or white spirit. The surface must be dry (including not condense). The surface is pre-primed.

■ Learn more about the priming system of materials:

- **plastic:** primed Bronya Universal Elastic or a primer layer can be made from Bronya ThermoHydroPlast;
- **wood:** primed either Bronya Universal Elastic or Bronya ThermoHydroPlast;
- **black metal:** primed Bronya Metal Elastic;
- **polycarbonate:** Priming Bronya Prism;
- **plastic polycarbonate:** the Bronya Prism is primed with geotextile reinforcement.

■ IMPORTANT! The primer layer is not considered the first calculated layer.

■ 2.Preparation of waterproofing coating BRONYA THERMOHYDROPLAST

■ ***CHECK THE INTEGRITY OF THE SEALS BEFORE OPENING THE CONTAINER***

BRONYA THERMOHYDROPLAST is ready for use, it must be intensively mixed with a mixer (at least 3-5 minutes). The mixing speed is **not higher than 120-150 rpm**. BRONYA THERMOHYDROPLAST must be diluted with xylene by **no more than 3-10%**.

3. Application of waterproofing thermal insulation coating BRONYA THERMOHYDROPLAST

3.1 It is recommended to apply the material: with a brush, roller or an airless spray device GRACO Mark 5, Mark 7, Mark 10 with a nozzle 527.

3.2 The material is applied in layers of 0.5 mm at a time. The average material consumption is about **1 liter per 1 square meter** with a layer thickness of 1 mm (approximate consumption when applying a brush coating on a flat non-absorbent surface). The material consumption is affected by the type of surface and the method of application.

3.3 The insulation works must be carried out under the following conditions:

- **Normal weather conditions:** no rain, fog, strong wind;
- **Air humidity:** no more than 80%;
- **Ambient temperature:** -25°C to +35°C (with surface humidity analysis);
- **ATTENTION!!! WORK IN WELL-VENTILATED AREAS (USE FORCED VENTILATION IN ROOMS, BASEMENTS, RECESSES!);**
- **DO NOT ALLOW NEAR AN OPEN SOURCE OF FIRE!**

3.4 After applying the first layer of waterproofing thermal insulation coating BRONYA THERMOHYDROPLAST, if necessary, you can immediately, without waiting for it to dry, evenly lay geotextile (density 80-100 g / m²), immediately pressing it with a roller or smoothing with a brush. After it dries before sticking, apply a second finishing layer of BRONYA THERMOHYDROPLAST.

Instead of geotextile, you can use a sickle grid, a paint grid with a 2 × 2 mm cell, mainly for flat surfaces!

The drying time of one layer of BRONYA THERMOHYDROPLAST coating is **from 15 to 30 minutes at an ambient temperature of +20 °C, from 3 to 12 hours** at high humidity, raining or subzero temperatures.

The complete formation of the polymer surface takes **from 72 hours to 2 weeks**, under normal weather conditions, which leads to the formation of a seamless monolithic coating.

After finishing the work, the tool is washed with an organic solvent xylene.

4. Safety precautions when working with BRONYA THERMOHYDROPLAST

1. ATTENTION!!! WORK IN WELL-VENTILATED AREAS (USE FORCED VENTILATION IN ROOMS, BASEMENTS, RECESSES!);

2. DO NOT ALLOW NEAR AN OPEN SOURCE OF FIRE!

3. Use overalls, personal protective equipment of respiratory organs, vision, skin;

4. Do not allow the BRONYA THERMOHYDROPLAST to get into the eyes and skin;

5. In case of contact with the eyes, it is urgently necessary to rinse them with plenty of water and immediately consult a doctor.

5. Storage and transportation conditions BRONYA THERMOHYDROPLAST

Storage of the BRONYA THERMOHYDROPLAST material is carried out in tightly closed containers in dry rooms at **temperatures from -25 °C to +30 °C**. The shelf life of the material is **12 months**.