

BRONYA

SUPERFINE HEAT INSULATION



Selection & Specification Data

Product Name	Bronya Fireprotection
Description	Bronya Fireprotection used in construction for the protective finish bearing metal structures inside the building, operated in different atmospheric conditions. The compound is used both for industrial and for domestic use. Designed to improve the fire resistance of load-bearing metal building constructions.
Features	<ul style="list-style-type: none"> • Metal infrastructure of oil refineries (refinery) • Chemical companies, including being the source of impact low - and middle aggressive acid or alkaline environments • Open and closed Parking lots, shelves, overpasses • Civil engineering projects without any restrictions • Additional facilities where appropriate use of fire-retardant paints without topcoats
Base	Water-based Acrylic Insulation Coating
Gloss	Flat
Priming	Self priming over non-ferrous materials (stainless steel & aluminum). Primer required for carbon steel substrates.
Topcoats	Please consult NPO Bronya Ltd.
Wet Weight	1.25 kg/liter
Weight dry film to area	0.035 lbs/ft ² at 20 mils dft (0.170 kg/m ² at 0.50 mm dft)
Practical Volume Solids Content	не менее 50%
Average Coat Thickness	1 mm
Storage	Do not subject wet coating in pail form to freezing conditions. Coating should be kept in a warehouse between 60°F and 90°F

Substrates & Surface Protection

Surface Prep	Surface should be dry and free of foreign matter. Surface prep can be used to NACE 1-3 (SSPC SP 5-6) when applicable.
Ferrous Surfaces	Should be primed prior to application of Bronya Fireprotection. Since the coating is waterbased, it is important to have a boundary layer of protection to prevent flash rusting.
Non-ferrous Surfaces	The coating can be applied directly to nonferrous surfaces. Surface should be clean and free of any oil, dirt or other foreign matter.

Application Equipment

Listed below are the general equipment guidelines for the application of this product.

Airless Sprayer	Pump Ratio:	33:1 or larger
	Volume:	1.5 gpm (5.7 lpm) or greater
	Hose:	3/8" or larger with no more than 3' of 1/4" whip. 1/2" hose recommended for length above 50'.
	Tip Size:	0.017" (for tight spots) 0.019–0.023" (Normal use)
	Pressure:	Any pressure
Small Spray Application	Please consult NPO Bronya Ltd. for the Small Application Gun. This gun is excellent for small applications and touch-ups.	
Brush	Can use	
Rolling	Can use	

Application Conditions

Surface Temperatures	Surface temperatures for applications should be greater than 60°F (15°C) or above. Lower surface temperatures will increase dry times.
Applications	Ambient & Cold (60°–139°F, 15°–59°C): For temperatures (surface or ambient — whichever is lower), an initial tack coat is recommended of 10 mils (0.25 mm or 250 microns). This tack coat will help eliminate sag on vertical wall applications. Tack coat should be dry to touch prior to next pass. Typical coat thickness should not exceed 20–22 mils (0.5–0.55mm) wet. Coating can be reapplied after each coat is thoroughly dry. Hot (>140°F, >60°C): Please consult NPO Bronya Ltd.
Application Thickness	Product can be applied in successive coats to increase insulation ability. There are no upper limitations.
Dryfall	Dryfall within a 3 ft radius

Cleanup & Safety

Cleanup	Equipment may be cleaned with soap & water
Safety	Half-face respirator recommended with ammonia cartridge or better. Eye protection recommended.
Ventilation	Recommended for constricted areas.
Caution	This material is not for human consumption
Clothing	Safety clothing & gloves are recommended

Coating Specifications

appearance	White, thick, a homogeneous mass, when dry forms a matte coating	#.4.3
Mass fraction nonvolatile substances, %, not less than	50	GOST 17537 #. 4.4
Drying time to level 3 at a temperature of (20±2)° C, h, not more	1	GOST 19007
Dynamic viscosity on Brookfi ice MPa.h, not less	17000	GOST 1929-87
The degree of grinding, micrometers, no more	50	GOST 8784
The ability of the coating to peel	Should not exfoliate from metal	n.
Insulating properties of the coating, minutes, no less	60	n.

Mixing & Thinning

- Mixing** Only a mud mixing paddle should be used. Use 1/2" drill motor to stir contents with paddle. Make sure drill is set to reverse to ensure that the paddle will not mar the bucket's inner wall. Please consult NPO Bronya Ltd. for paddle, if needed.
- Thinning** Thinning is normally not needed. Please consult NPO Bronya Ltd. for specific instructions if thinning is desired.
- Pot life** Coating is one part, so no catalyzation is needed. Pail can be reused if properly sealed.
- Container** 20 liters (25kg)

Package, Handling & Storage

- Container Wet (with pail/lid)** 25.8–26.7 kg per 20 liters
- Net Contents** 25 kg per 20 liters
- Flash Point (Setaflash)** None
- Storage** Do not subject wet coating in pail form to freezing conditions. Coating should be kept in a warehouse between 60°F and 90°F.
- Shelf Life** 12 months shelf life from manufacture date.
- Caution** Do not let product freeze.

Given the thickness steel structure, mm	Fire resistance, min							
	45		60		90		120	
	thickness, mm	consumption, kg/m ²	thickness, mm	consumption, kg/m ²	thickness, mm	consumption, kg/m ²	thickness, mm	consumption, kg/m ²
2,4	1,2	1,69	1,53	2,15	-	-	-	-
2,6	1,21	1,8	1,56	2,29	-	-	-	-
2,8	1,18	1,74	1,51	2,22	-	-	-	-
3	1,14	1,69	1,47	2,16	-	-	-	-
3,2	1,11	1,64	1,42	2,09	-	-	-	-
3,4	1,07	1,59	1,38	2,03	2	2,82	-	-
3,6	1,04	1,53	1,34	1,96	2,26	3,33	-	-
3,8	1	1,48	1,29	1,9	2,21	3,27	-	-
4	0,97	1,43	1,25	1,83	2,17	3,2	-	-
4,2	0,93	1,37	1,2	1,77	2,12	3,14	-	-
4,4	0,9	1,32	1,16	1,7	2,08	3,07	-	-
4,6	0,86	1,27	1,11	1,64	2,03	3,01	-	-
4,8	0,83	1,21	1,07	1,57	1,99	2,94	-	-
5	0,79	1,16	1,03	1,51	1,94	2,87	-	-
5,2	0,76	1,11	0,98	1,44	1,9	2,81	-	-
5,4	0,72	1,06	0,94	1,38	1,85	2,74	-	-
5,6	0,69	1	0,89	1,31	1,81	2,68	-	-
5,8	0,62	0,87	0,8	1,14	1,76	2,61	-	-
6	0,65	0,95	0,85	1,25	1,72	2,54	-	-
6,2	0,65	0,95	0,85	1,25	1,67	2,48	-	-
6,4	0,65	0,95	0,85	1,25	1,63	2,41	-	-
6,6	0,65	0,95	0,85	1,25	1,58	2,35	-	-
6,8	0,65	0,95	0,85	1,25	1,54	2,28	-	-
	0,65	0,95	0,85	1,25	1,49	2,22	-	-
7,2 and more	0,65	0,95	0,85	1,25	1,3	1,83	2,3	3,3

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