

BITUPREN 100 – Waterproofing anticorrosive mastic



BITUPREN 100 is a bitumen-polymeric mastic used for all kinds of anticorrosive protective treatment of any building structures constantly exposed to UV, water, most of acid and alkali solutions, oxidization and aging. Can be applied on any surfaces such as ferrous and galvanized metals, concrete, slate, wood etc. Easy application and quick drying time make BITUPREN 100 an ideal versatile product for professionals and for those who do their work in DIY (do it yourself) way.

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Paint made of modified bitumen-polymeric water-based emulsion.

DESCRIPTION

Single component product which provides a thin layered seamless waterproof coating for protection of any construction elements exposed to UV, water, most of acid and alkali solutions, oxidization and aging. Can be applied on any surfaces such as ferrous and galvanized metals, concrete, slate, wood etc.

USAGE

- Protection of concrete and metal constructions from corrosion and aggressive environment.

APPEARANCE

Moderate viscosity black liquid with a mild oil aroma.

PHYSICAL PROPERTIES

- Density: 1000±2 % g/l
- Solids content: 60±2 %
- Viscosity: 2000 mPs

APPLIED COATING PROPERTIES

Solidified coating forms a monolithic seamless rubber-like coating which being thoroughly dried gets such characteristics as high strength and elasticity, mechanical deformation resistance, absolute water-, vapor- and gas resistance. The product is not resistant to a long-time contact with oil products, gasoline and machine oil.

COATING PHYSICAL PROPERTIES

- Coating thickness: 4,00 mm
- Hardness: 35 A
- Strength: 0,90 mPa (14 days later)
- Adhesion to concrete: 1,10 mPa
- Adhesion to steel: 1, 60 mPa
- Temperature resistance (at 120 C): No swelling or leakage
- Water permeability (0,001 mP): No signs of water intrusion
- Moisture absorption: <1%

APPLICATION

BITUPREN 100 is a single component product which is ready to use.

It is applied by spraying equipment or by hand with a brush or a paint roller. Application takes place at temperatures above +5C. Do not apply on open surfaces if there is a threat of rain.

COATING DRYING TIME (temperature 25C, relative humidity 55%)

Surface drying time – up to 30 min

Deep drying – up to 12 hours

COVERAGE

The apply rate of 1,4 kg per m² for a film thickness of 1, 0 mm is recommended. Being applied manually the product is applied by layers allowing the surface to dry before next layer application.

SURFACE PREPARATION

The product is applied on dry, clean, dirt and oil free base, with no coatings or inclusions which may deteriorate the adhesive ability of the product.

Metal bases should be mechanically cleaned, oil overlays should be removed, corrosive layer and paint coat with low adhesive should be free of dust.

PRODUCT SIZES AND STORAGE

5 and 20 kg buckets.

Storage temperature: +10C to + 30C.

Shelf life: 12 months in a closed container.

Once used the product should be stored in a closed container.

DO NOT ALLOW THE PRODUCT TO FREEZE!

PRODUCT PREPARATION BEFORE APPLYING

The product is ready to use. Do not dilute or use chemical solvents. Before applying the product should be thoroughly stirred.

INSTRUMENT CLEANING

Instruments must be rinsed with water in order to remove liquid product. Solidified product can be removed with mineral spirit (white spirit).

SAFETY INFORMATION AND HYGIENE

The product is water-based, non-toxic, contains no chemical solvents.

In case of skin contact, the product doesn't cause skin burns or irritations.

Use rubber gloves, special clothing and other kinds of personal protective equipment while using the product.

The liquid product can be removed with water and soap, then skin should be treated with softening cream or oil.

CHEMICAL RESISTANCE OF THE COATING TOP

AGGRESSIVE FLUIDS

No	Chemical environment	Concentration level	Resistance at	
			20°C	60°C
1	Acetic acid	100%	R	L
2	Acetic acid	10%	R	R
3	Acetic anhydride	100%	R	L
4	Acetone	100%	N	N
5	Adipic acid	Saturated solution	R	R
6	Allyl alcohol	96%	L	N
7	Aluminium chloride	Saturated solution	R	R
8	Aluminium fluoride	Saturated solution	R	R
9	Aluminium sulfate	Saturated solution	R	R
10	Alum	Solution	R	R
11	Solution of ammonium hydroxide	Dilute solution	R	R
12	Ammonia gas	100%	R	R
13	Liquid ammonia	100%	R	R
14	Sal ammoniac	Saturated solution	R	R
15	Ammonium fluoride	Solution	R	R
16	Ammonium nitrate	Saturated solution	R	R
17	Ammonium sulfate	Saturated solution	R	R
18	Ammonium sulfide	Solution	R	R
19	Amyl acetate	100%	L	N
20	Amyl alcohol	100%	L	N
21	Aniline	100%	L	N
22	Antimony trichloride	90%	R	R
23	Arsenic acid	Saturated solution	R	R
24	Aqua regia	HCL-HNO33/1	L	N
25	Soda	Saturated solution	R	R
26	Barium chloride	Saturated solution	R	R
27	Caustic baryta	Saturated solution	R	R
28	Barium sulfate	Saturated solution	R	R
29	Barium sulfide	Solution	R	R
30	Benzaldehyde	100%	L	N
31	Benzene	-	N	N
32	Benzoic acid	Saturated solution	R	R

33	Beer	-	R	R
34	Borax (sodium tetraborate)	Saturated solution	R	R
35	Boric acid	Saturated solution	R	R
36	Dry bromine gas	100%	L	N
37	Liquid bromine	100%	L	N
38	Gaseous butane	100%	N	N
39	1-Butanol	100%	N	N
40	Butyric acid	100%	R	L
41	Calcium carbonate (limestone)	Saturated solution	R	R
42	Calcium chlorate	Saturated solution	R	R
43	Calcium chloride	Saturated solution	R	R
44	Calcium nitrate	Saturated solution	R	R
45	Calcium sulfate	Saturated solution	R	R
46	Calcium sulfide	Dilute solution	L	L
47	Dry gaseous carbon dioxide	100%	R	R
48	Carbon bisulfide	100%	L	N
49	Carbon monoxide	100%	R	R
50	Chloroacetic acid	Solution	R	R
51	Carbon tetrachloride	100%	N	N
52	Aqueous solution	Saturated solution	L	N
53	Dry chlorine gas	100%	L	N
54	Chloroform	100%	N	N
55	Chromic acid	20%	R	L
56	Chromic acid	50%	R	L
57	Citric acid	Saturated solution	R	R
58	Copper chloride	Saturated solution	R	R
59	Copper nitrate	Saturated solution	R	R
60	Copper sulfate	Saturated solution	R	R
61	Cresylic acid	Saturated solution	N	-
62	Cyclohexanol	50%	L	N
63	Cyclohexanone	100%	L	N
64	Decahydronaphtalene	100%	L	N
65	Dextrin	Solution	R	R
66	Diethyl ether	100%	N	-
67	Diethylphthalate	100%	L	N
68	Dioxane	100%	L	N
69	Ethandiol	100%	L	N
70	Ethanol	40%	L	N
71	Ethyl acetate	100%	N	N

72	Ethylene trichloride	100%	N	N
73	Ferrous chloride	Saturated solution	R	R
74	Ferrous nitrate	Saturated solution	R	R
75	Ferric sulfate	Saturated solution	R	R
76	Ferrous dichloride	Saturated solution	R	R
77	Ferrous sulfate	Saturated solution	R	R
78	Fluorine gas	100%	N	N
79	Hexafluorosilicic acid	40%	R	R
80	Formaldehyde	40%	L	L
81	Formic acid	50%	R	R
82	Formic acid	98%-100%	R	R
83	Furfuryl alcohol	100%	L	N
84	Gasoline	-	N	N
85	Glacial acetic acid	96%	R	R
86	Glucose	Saturated solution	R	R
87	Glycerin	100%	R	L
88	Glycol	Solution	R	R
89	Heptane	100%	N	N
90	Hydrobromic acid	50%	L	L
91	Hydrobromic acid	100%	L	L
92	Hydrobromic acid	10%	R	R
93	Hydrobromic acid	35%	R	R
94	Hydrocyanic (prussic) acid	10%	R	R
95	Hydrofluoric acid	4%	R	R
96	Hydrofluoric acid	60%	L	R
97	Hydrogen	100%	R	R
98	Hydrogen peroxide	30%	L	L
99	Hydrogen peroxide	40%	N	N
100	Hydrogen sulfide gas	100%	R	R
101	Lactic acid	100%	R	R
102	Lead acetate	Saturated solution	R	-
103	Magnesium carbonate	Saturated solution	R	R
104	Magnesium chloride	Saturated solution	R	R
105	Magnesium hydroxide	Saturated solution	R	R
106	Maleic acid	Saturated solution	R	R
107	Mercuric chloride	Saturated solution	R	R
108	Mercuric cyanide	Saturated solution	R	R
109	Mercury	100%	R	R
110	Methanol	100%	R	L

111	Methylene chloride	100%	N	N
112	Milk	-	R	R
113	Molasses	-	R	R
114	Nickelous chloride	Saturated solution	R	R
115	Nickelous nitrate	Saturated solution	R	R
116	Nickelous sulfate	Saturated solution	R	R
117	Nicotinic acid	Dilute solution	R	R
118	Nitric acid	25%	N	N
119	Nitric acid	50%	N	N
120	Nitric acid	75%	N	N
121	Nitric acid	100%	N	N
122	Oil and grease	-	L	N
123	Oleic acid	100%	L	N
124	Orthophosphoric acid	50%	R	R
125	Orthophosphoric acid	95%	R	L
126	Oxalic acid	Saturated solution	R	R
127	Oxygen	100%	R	-
128	Ozone	100%	L	N
129	Kerosene	-	L	N
130	Phenol	Solution	L	L
131	Phosphorous trichloride	100%	R	L
132	Photographic developer	Concentration on demand	R	R
133		Saturated solution	R	-
134	Potassium bicarbonate	Saturated solution	R	R
135	Potassium bisulfite	Solution	R	R
136	Potassium bromate	Saturated solution	R	R
137	Potassium bromide	Saturated solution	R	R
138	Potassium carbonate	Saturated solution	R	R
139	Potassium chlorate	Saturated solution	R	R
140	Potassium chloride	Saturated solution	R	R
141	Potassium chromate	Saturated solution	R	R
142	Potassium cyanide	Solution	R	R
143	Potassium bichromate	Saturated solution	R	R
144	Potassium ferricyanide	Saturated solution	R	R
145	Potassium ferrocyanide	Saturated solution	R	R
146	Potassium fluoride	Saturated solution	R	R
147	Potassium hydroxide	10%	R	R
148	Potassium hydroxide	Solution	R	R

149	Potassium hypochlorite	Solution	R	L
150	Potassium nitrate	Saturated solution	R	R
151	Potassium orthophosphate	Saturated solution	R	R
152	Potassium perchlorate	Saturated solution	R	R
153	Potassium permanganate	20%	R	R
154	Potassium persulfate	Saturated solution	R	R
155	Potassium sulfate	Saturated solution	R	R
156	Potassium sulfite	Solution	R	R
157	Propionic acid	50%	R	R
158	Propionic acid	100%	R	L
159	Pyridine	100%	N	N
160	Quinone	Saturated solution	R	R
161	Salicylic acid	Saturated solution	R	R
162	Silver acetate	Saturated solution	R	R
163	Silver cyanide	Saturated solution	R	R
164	Silver nitrate	Saturated solution	R	R
165	Sodium bentonite	Saturated solution	R	R
166	Sodium diphosphate	Saturated solution	R	R
167	Sodium hydrosulfite	Solution	R	R
168	Sodium bromide	Saturated solution	R	R
169	Sodium carbonate	Saturated solution	R	R
170	Sodium chlorate	Saturated solution	R	R
171	Sodium chloride	Saturated solution	R	R
172	Sodium cyanide	Saturated solution	R	R
173	Sodium ferricyanide	Saturated solution	R	R
174	Sodium ferrocyanide	Saturated solution	R	R
175	Sodium fluoride	Saturated solution	R	R
176	Sodium hydroxide	40%	R	R
177	Sodium hydroxide	Saturated solution	R	R
178	Sodium hypochlorite	15% active chlorine	R	R
179	Sodium nitrate	Saturated solution	R	R
180	Sodium nitrate	Saturated solution	R	R
181	Sodium orthophosphate	Saturated solution	R	R
182	Sodium sulfate	Saturated solution	R	R
183	Sodium sulfide	Saturated solution	R	R
184	Sulfur dioxide	100%	R	-
185	Sulfur trioxide	100%	N	N
186	Sulfuric acid	10%	R	R
187	Sulfuric acid	50%	R	R

188	Sulfuric acid	98%	R	N
189	Sulfuric acid	Fumes	N	N
190	Sulfurous acid	30%	R	R
191	Tannic acid	Solution	R	R
192	Tartaric acid	Solution	R	R
193	Thionyl chloride	100%	N	N
194	Toluene	100%	N	N
195	Triethylamine	Solution	R	L
196	Urea	Solution	R	R
197	Urine	-	R	R
198	Water	-	R	R
199	Wine vinegar	-	R	R
200	Wines and strong drinks	-	R	R
201	Xylol	100%	N	N
202	Yeasts	Solution	R	R
203	Zinc carbonate	Saturated solution	R	R
204	Zinc chloride (soldering flux)	Saturated solution	R	R
205	Zinc chloride (II)	Saturated solution	R	R
206	Zinc chloride (IV)	Saturated solution	R	R
207	Zinc oxide	Saturated solution	R	R
208	Zinc sulfate	Saturated solution	R	R

R – resistant, L – limited resistant, N – non-resistant