

PU BINDER 1120

COLORED POLYURETHANE BINDER

GENERAL CHARACTERISTICS

100% solids, solvent-free, elastic, MDI-based, three-component polyurethane based color binder. Resists against humidity, water, abrasion, acids-alkalis and most of the chemicals. It is durable and water-impermeable. It is mixed with SBR rubber to form colored layers.

It exhibits excellent adhesion to all rubber granules and gives a strong performance both in terms of tensile strength and durability.

It is mixed with **RECYCLED RUBBER 858** for the creation of the elastic safety floorings **SAFEPOL** or other flexible rubber floorings, ideal for playgrounds, athletic tracks, schools etc.

PU BINDER 1120 cured with the air humidity, has low viscosity, is solvent free. **PU BINDER 1120** combines and bonds SBR rubber granules, RIM components, polyurethane granules and sponge particles. Also it can be used as lining for insulation and for pasting.

TECHNICAL DATA

Mixing Ratio (A:B)	4 : 1 (By weight)
Density of Comp. A (20°C)	:app. 1,55±0.1 gr/cm ³
Density of Comp. B (20°C)	:app. 1,22±0.05 gr/cm ³
Density of mixture(A+B-20°C)	:app. 1,48±0.1 gr/cm ³
Pot-life (23°C)	: 30-75 min.
Application temperature	: Min 5°C
Curing (20°C and 60% relative humidity)	: After 24 hours.
Color	: Red, Green
Shelf Life:	: 12 months under room conditions.

PREPARATION-APPLICATION

MIXING OF COMPONENTS/APPLICATION:

Good, dry cleaning of the surface from dust and residues.

Priming of the surface with the special **POLYURETHANE PRIMER 870** in two layers.
Consumption: 250-400 gr/m², depending on the absorption of the underlay. It is

recommended that the second layer should be applied in sections each time, right before the application of **PU BINDER 1120** and **RECYCLED RUBBER 858** in order to ensure proper adhesion.

Adding B to A: The resin component should be thoroughly stirred to incorporate any slight separation. Whilst continuing stirring, the contents of the hardener container should be added. Continue stirring until a homogeneous mix is obtained.

Adding SBR to A+B component mixture:

After homogenous mixture of A (resin) and B (hardener) component is obtained, add this mixture to black recycled rubber granules SBR (0,5 mm-2 mm) and mix it in a mixing machine. Mixing should be performed using a low revolution mixer (300-600 rpm) for 1-2 min. Stirring of the mixture should be performed thoroughly near the sides and bottom of the container in order to achieve homogeneity.

Adding C (color pigment) to A+B+SBR:

Then, add C (color pigment) component to this mixture and continue stirring.

Next, the mixture is poured on the surface and spread on the desired thickness using paving machine or by hand. Consumption: 6,5kg/m²/cm. Note that in order to apply by paving machine it's better to add in the mix some 2% (on the whole mix) of normal clear **PU BINDER 1118** before laying it down, to make the mixture better compacted.

Finally any small irregularities on the surface may be removed by rolling the surface using a metal cylinder.

Note that application is done by paving machine only if the thickness is above 6 mm. Otherwise trowel will be used.

The mixed material must be used within 30-75 minutes of mixing at 20°C.

Recommended SBR granules thickness is (0,5 mm-2 mm). Otherwise during the friction of the surface, rupture percentage of granules will be more.

RATIO MIXTURE/CONSUMPTION

Consumption for Complete mix of **PU BINDER 1120** coloured binder (3 components) and SBR: approx. 6.65 kg/m²/cm.

Mixing ratio of SBR:colored binder:color pigment = 80:20:4, which means 80 units SBR, 20 units A and B components, 4 units C component

PACKAGING

30 kg. Metal Pails (A and B separately) OR in Barrels.
6 kg. Bag (C pigment)
1.000 kg Bag SBR

STORAGE

12 months in unopened original packaging stored in standard room conditions.

REMARKS

The floor must be smooth, dry and clean. Must be removed from oil, dirt, rust and burr. Do not add any foreign material. In application, if ambient and surface temperatures are under +10 degrees Celsius or below +30 degrees Celsius, the optimum temperature must be waited. Concrete humidity should not be above 4%, ambient humidity should be at least 40% and most 80%. To begin the application, must wait for the appropriate humidity

Working time of **PU BINDER 1120** decreases when ambient temperature rises.

Prolonged storage of partially used containers containing **PU BINDER 1120** must be avoided as contact with atmospheric moisture will result in skinning and clouding of the product.

CAUTION

The application must take place in well-aired places using protective gloves and safety glasses with side guards. Skin or eye contact must be avoided, otherwise wash carefully with soap and water. Harmful if swallowed. Seek immediately medical attention.

For more information consult the material safety data sheet.

The information given here is true, represents our best knowledge and is based not only on laboratory work, but also on field experience. However, because of numerous factors affecting results we offer this information without any guarantee and no patent liability is assumed. For additional information or questions, contact the technical department of KDF LTD.