

**EDITION: MAY 2019** 

## **PU PRIMER 870**

# TRANSPARENT, ONE COMPONENT, POLYURETHANE-BASED PRIMER, USED AS AN ADHESIVE COMPONENT BETWEEN SUBFLOOR AND SPORTS SYSTEMS

## GENERAL CHARACTERISTICS

**POLYURETHANE PRIMER 870** is a clear, polyurethane-based, one-component primer, which is used as an adhesive component between the sub-floor and sport systems.

- ✓ Penetrates in depth.
- ✓ Ideal for old and new surfaces.

#### **TECHNICAL DATA**

Basis: one-component polyurethane

Appearance: liquid

Color:

transparent

Viscosity: 50 – 250 mPa•s at 25°C

Density:

0.9- 1.0 Kg/Lt Temperature for the application and drying of

the material:  $10 - 40^{\circ}$ C

## PREPARATION-APPLICATION

Applied on dry surfaces without rising humidity issues, free of materials that might prevent bonding e.g. dust, loose particles, grease etc (in case of asphalt or concrete). The success in the application depends on the right preparation of the underlay and use of the material.

- Good, dry cleaning of the surface from dust and residues.
- Priming of the surface with PU PRIMER 870 applied by airless sprayer equipment or brush, roller. The base layer (wet-pour mixture of SBR and PU BINDER 1118) should be constructed while PU PRIMER 870 is still a bit sticky. Curing takes place at ambient temperature by evaporation of the solvent and reaction with atmospheric moisture. High temperatures and moisture will shorten the cure time. PU PRIMER 870 is applied in two or more layers as a thin film, and on the final layer, wet-pour mixture of SBR and PU BINDER 1118 can be applied on sticky surface.
- The temperature should not fall below 10°C during curing.
- Opened drums should be used up quickly.
- The layer (wet-pour mixture of SBR and PU BINDER 1118) should be constructed while the final layer of **PU PRIMER 870** is still sticky.
- NOTE: Rain will cause the primer to lose its function! If the primer was affected by rain, the base layer should not be constructed! Instead, the sub floor has to dry and the primer application has to be repeated.

**KDF** - Kataskeves Dapedon LTD e : exports@kdf.gr w : www.kdf.gr





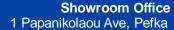












57010, Thessaloniki, Greece t / f : 0030 2310 829598

Accounting Office



CONSUMPTION	200-300 gr/m <sup>2</sup> depending on the type and the absorbency of the underlay.
APPLICATION TOOLS	Brush and airless sprayer. Tools should be cleaned with a PU solvent immediately after use.
<u>PACKAGING</u>	Drums / Barrels.
STORAGE	One year in unopened containers in cool and dry places, out of sunlight, with minimum temperature 5°C and maximum temperature 30°C.
REMARKS	<ul> <li>Working time of POLYURETHANE PRIMER 870 decreases when ambient temperature rises.</li> <li>Prolonged storage of partially used containers containing POLYURETHANE PRIMER 870 must be avoided as contact with atmospheric moisture will result in skinning and clouding of the product.</li> </ul>
CAUTION	The application must take place in well-aired places using protective gloves. Skin or eye contact must be avoided, otherwise wash carefully with soap and water.
	For more information consult the 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.



















**EDITION: MAY 2019** 

## **PU BINDER 1178**

## SPECIAL POLYURETHANE BINDER

## **GENERAL CHARACTERISTICS**

aromatic polyisocyanate-prepolymer moisture-curing diphenylmethane diisocyanate. It is MDI based and solvent free. 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, SBR granules, for the creation of the innovative, elastic, safety playground flooring SAFEPOL SANDPROOF SYSTEM or other flexible rubber floorings, ideal for playgrounds, schools etc.

PU BINDER 1178 cured with the air humidity, has low viscosity and is solvent free. PU BINDER 1178 combines and bonds SBR or EPDM rubber granules, RIM components, polyurethane granules and sponge particles. Also it can be used as lining for insulation and for pasting.

**TECHNICAL DATA** 

Density (25°C)

8000±mPas

Viscosity (25°C)

Clear, pale yellow

1,09±0.1 gr/cm3

**SUBSTRATE REQUIREMENTS**  Concrete quality:

at least C20/25

Age:

Color

at least 30 days

Moisture content:

below 4%

## **PREPARATION-APPLICATION**

On-site applications: Applied on dry surfaces, free of materials that might prevent bonding e.g. dust, loose particles etc (in case of asphalt or concrete). The success in the application depends on the right preparation of the underlay and use of the material.

- 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/m<sup>2</sup>, 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 1178 and SBR granules in order to ensure proper adhesion.
- Good mixing of the PU BINDER 1178 and the RECYCLED RUBBER 858 in granulometry of 2-4mm or 2-5mm. 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

**KDF** - Kataskeves Dapedon LTD e:exports@kdf.gr w:www.kdf.gr



















of the container in order to achieve homogeneity.

- Following, the mixture is poured on the surface and spread on the desired thickness using
  paving machine or it can be done manually if the applicator is experienced, with rake for
  spreading, (wooden) straightedge for initial smoothing, flat metal trowel for final smoothing
  and compacting, cylinder weighing 8-15kg for final compacting-(cylinder should be cleaned
  repeatedly with diesel to remove stuck granules from its surface). Consumption: 7kg/m²/cm.
- Good mixing of the PU BINDER 1178 and the RECYCLED RUBBER 858 in granulometry
  of 0.5-2mm. 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.
- Following, the mixture is poured on the surface and spread on the desired thickness using
  paving machine or it can be done manually if the applicator is experienced, with rake for
  spreading, (wooden) straightedge for initial smoothing, flat metal trowel for final smoothing
  and compacting, cylinder weighing 8-15kg for final compacting-(cylinder should be cleaned
  repeatedly with diesel to remove stuck granules from its surface). Consumption: 7,2kg/m²/cm.
- Follows the application of **KDF-PU 1055** a special waterproof and sandproof, polyurethane pore filler.
- And finally a top coat is applied, **KDF-PU 1056**, polyurethane, modified, UV-resistant, aliphatic, elastic, glossy, two-component top coating.

#### **PACKAGING**

220kg in barrels.

## STORAGE

One year in unopened containers in dry places with minimum temperature 5°C and maximum temperature 30°C, protected from moisture and heat.

### **REMARKS**

The floor must be smooth, dry and clean. Must be removed from oil, dirt, rust and burr. Do not add any foreign material. 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 1178** decreases when ambient temperature rises.

Prolonged storage of partially used containers containing **PU BINDER 1178** 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. Skin or eye contact must be avoided, otherwise wash carefully with soap and water.

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.

**KDF** - Kataskeves Dapedon LTD e:exports@kdf.gr w:www.kdf.gr















1 Papanikolaou Ave, Pefka 57010, Thessaloniki, Greece t / f: 0030 2310 829598 Accounting Office 19 Mitropoleos Str



EDITION: MAY 2019

## **SBR RUBBER GRANULES 858**

## GENERAL CHARACTERISTICS

It can be used in sports facilities as infill in synthetic grass with the parallel use of round sand and also as one of the components in case of cast applied wet-pour systems for playground floorings or as shock-pad for sport subfloors in athletic tracks and sports fields.

Rubber granule is derived from car and truck tires. During processing, the tires are mechanically granulated, removing all metal and synthetic fibers, as well as any other foreign part contained in there with specially designed sieves, so as to produce a 99.99% clear rubber with high quality.

### **PROPERTIES**

- 100% recyclable
- Long life
- Resistance to adverse weather conditions
- High shock absorbency and vibration damping
- · High abrasion resistance

## PREPARATION-APPLICATION

In sports facilities and playgrounds to ensure flexibility of surface and vibration absorption.

TECHNICAL CHAPACTERISTICS

CHARACTERISTICS DENSITY: 0.48kg/cm<sup>3</sup>

**Granulometry 1-3mm** 

SPECIFIC GRAVITY 1.20+/-.05 (Water = 1.0)
HARDNESS 60

HUMIDITY(%) <0.65

ELASTICITY 100% - No change RESISTANCE 113N/cm - Excellent

















**PACKAGING** Packaging is available in big-bags -1 ton in following sizes:

Grain size 0,5-1,5 mm

Grain size 0,5-2,5 mm

Grain size 0.5-4.0 mm

Grain size 2-8 mm

Grain size 8-20 mm

Grain size 80-50 mm

Grain size 80-120 mm

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.

















**EDITION: DECEMBER 2019** 

## **KDF-PU 1055 PORE FILLER**

## FOR SANDPROOF-WATERPOOF PLAYGROUND FLOORINGS

## GENERAL CHARACTERISTICS

**KDF-PU 1055 PORE FILLER** is a sealing, sandproof and waterproof modified pore filler with high elasticity that can be applied over SBR cushion layers.

**KDF-PU 1055 PORE FILLER** resists against sand penetration/ depositing, humidity, water and most of the chemicals. It has very good filling capacity and thixothropic properties. It has low fluidity feature with its filler structure. It can be easily applied. It provides strong and very elastic filling after the reaction.

**TECHNICAL DATA** 

Mixing Ratio 90.8 : 9.2 (By weight)

Density of mixture (25°C) 1.69-1.79 Kg/lt

Viscosity of mixture (25°C) 40000-55000 mPa•s at 25°C

Pot-life (25°C) 30-40 min

Application temperature Min 10°C

Curing (25°C and %60 relative humidity)

After 24 hours it can be sanded

Color Creme

## PREPARATION-APPLICATION

It is used to fill pores, cracks, dilation spaces, holes to smooth and repair the floor and other filling applications. Especially used for sealing and sandproofing in-situ applied SBR (or EPDM) layers in SAFEPOL SANDPROOF system

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. The mixed material must be used within 30-40 minutes of mixing at 25°C The surface must be dry and clean. **KDF-PU 1055 PORE FILLER** can be applied by trowel.

CONSUMPTION

2 kg per m<sup>2</sup> (depends on the surface absorbance and SBR granulation)

















**PACKAGING** 

Barrels 280kg

**STORAGE** 

One year in unopened containers in cool and dry places, out of sunlight, with minimum temperature 5°C and maximum temperature 30°C.

### **REMARKS**

Substrate must be dry, clean, and free from dust, grease and oil. Application must be done between 10°C - 40°C.

**KDF-PU 1055 PORE FILLER** has to be thoroughly sanded before the application of the top aliphatic coat **KDF-PU 1056 TOP COATING** in order to provide a smooth clean surface for the aliphatic top coat that will follow right after the sanding process is completed.

By no means **KDF-PU 1055 PORE FILLER** should be applied in thickness. The material is a pore filler and not a levelling material, and so it should be applied as pore filler (thin dragged layer over the substrate). In case it is applied in some areas in thickness, those areas should be well ground with sanding machine before subsequent layers in order to avoid cracking of the material due to oversized thickness.

Attention should be given also to possible trapped humidity in the pore filler, which could lead to cracks in the material or bubbles of the material.

Moreover, it is important that the mixing ratio between PU BINDER to SBR or EPDM rubber in the underlying cushion mixtures is kept as stable as possible in order to obtain similar flexibility of the cushion throughout the surface. Otherwise, areas with different flexibilities might occur. Same can happen if the mixing is not properly done in the paving machine or in the barrels/drums to secure uniformity throughout.

## **CAUTION**

Harmful if swallowed. Seek immediately medical attention. Rubber gloves and safety glasses with side guards should be worn.

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.



















**EDITION: DECEMBER 2019** 

## **KDF-PU 1056 TOP COATING**

## FOR SANDPROOF-WATERPOOF PLAYGROUND FLOORINGS

## GENERAL CHARACTERISTICS

**KDF-PU 1056 TOP COATING** is a polyurethane, two-component, solvent-based, glossy finish aliphatic, elastic coating for outdoor sports surfaces.

It is applied as a final, sealing layer on top of playground floorings made of **SBR rubber** plus **PU binder mixture**, or **EPDM** plus **PU binder** mixture, on safety tiles. Especially used as the sealing top coat in the **SAFEPOL SANDPROOF** system.

Provides a glossy surface with exceptional resistance in abrasion and various chemical agents.

It is UV-resistant and thus absolutely suitable for outdoor surfaces.

### **TECHNICAL DATA**

Mixing Ratio (transparent) 83,5 :16,5 (By weight)

Mixing Ratio (colored) 78: 22 by weight

Density (25°C)

Application Temperature app. 1,3±0.1 gr/cm3

Curing (25°C) Min 10°C

Color 8-10 hour

18 colors from KDF color chart

## PREPARATION-APPLICATION

- Good, dry cleaning of the surface from dust and residues using vacuum cleaner and squeegees.
- Caution must be taken so that temperature of the support surface as well as ambient air remains above 15°C during application and curing of the materials while relative humidity does not exceed 75%.
- 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. Airless sprayer or roller can apply KDF-PU 1056 TOP COATING.

#### **CONSUMPTION**

App.350-400 gr/m² for the SAFEPOL SANDPROOF system. Apply three coats at least.

**PACKAGING** 

5kg, 15kg set (A+B).

**STORAGE** 

12 months in unopened containers in dry places with minimum temperature 5°C and maximum temperature 30°C.

**KDF** - Kataskeves Dapedon LTD e : exports@kdf.gr w : www.kdf.gr

















**Showroom Office** 

1 Papanikolaou Ave, Pefka 57010, Thessaloniki, Greece t / f: 0030 2310 829598 Accounting Office



#### **REMARKS**

- Working time of **KDF-PU 1056 TOP COATING** decreases when ambient temperature rises.
- Prolonged storage of partially used containers containing KDF-PU 1056 TOP COATING
  must be avoided as contact with atmospheric moisture will result in skinning and clouding of
  the product.
- After hardening KDF-PU 1056 TOP COATING is completely safe for health.
- The three layers of KDF-PU 1056 TOP COATING will have to be applied strictly within 24 hours of one another (European conditions) or within 3-6 hours (GCC high-temperature conditions) in order to cover the surface swiftly and protect it from unwanted weather or other adverse conditions (sand dust, accumulated dirt or foreign matter etc.). In case the 24-hour limit (Europe) or the 3-6-hour limit (GCC) is surpassed or weather or other adverse conditions interfere between layers at any time, the surface might need sanding again to restore smoothness and cleanliness before applying subsequent layers of the aliphatic top coat.

## **CAUTION**

The application must take place in well-aired places using protective gloves. Skin or eye contact must be avoided, otherwise wash carefully with soap and water.

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.













**Showroom Office**