

RAPIDFOAM PAD 868

PREFABRICATED SHOCK-PAD FOR PLAYGROUND FLOORING

GENERAL CHARACTERISTICS

RAPIDFOAM PAD 868 is the prefabricated cushion sub-base of the playground flooring **QUICKLAWN PLAYGROUND SYSTEMS** of **SAFEPOL** and **SANDPROOF**, in pad lawn and in different thickness with a final PU, smooth, non-porous finish or even **EPDM** or **TPV** finish. It's saves a lot of time during the application and minimizes the duration of the project time keeping also the project clean.

RAPIDFOAM's PAD 868 sealed surface transforms totally the meaning of playground flooring worldwide. It provides an excellent critical fall height results with long term performance and resistance. **RAPIDFOAM PAD 868** can be installed in combination with different surface's finishes as EPDM granules or EPDM granules plus polyurethane sealed system or European SBR granules plus polyurethane sealed system in 15mm.

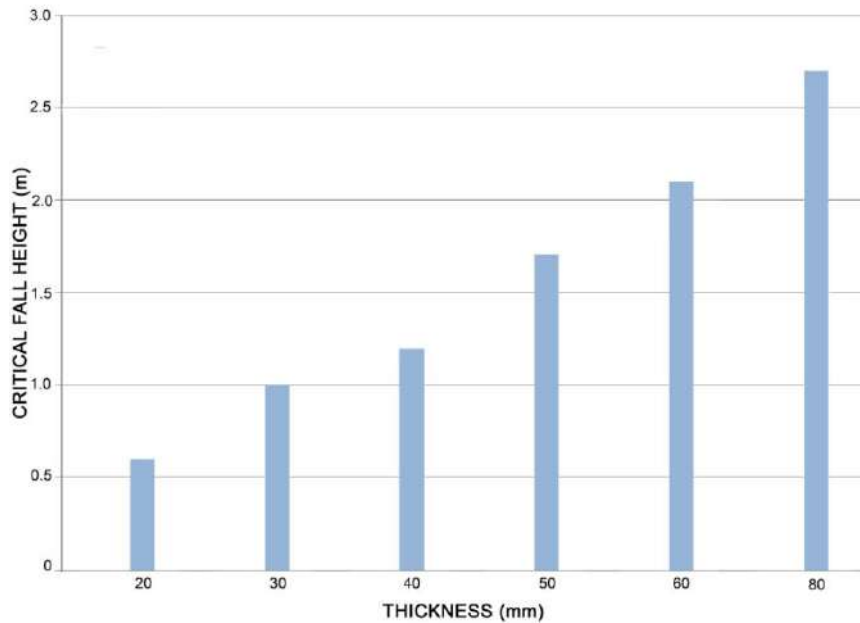
Offers:

- **Uniform** critical fall height over the surface.
- Stable critical fall height **at high level** on long term bases.
- **Good dimensional stability.**
- **Extremely easy and fast to install.**

TECHNICAL DATA

HIC according to EN 1177
Critical fall height@ HIC = 1000 (in m)

Thickness	20mm	30mm	40mm	50mm	60mm	80mm
Critical Fall Height	0.6	1.0	1.2	1.7	2.1	2.7



PREPARATION-APPLICATION

The sub-surface on which the material will be installed must be completely dry and clear of all foreign matter and free of dust, dirt, oil or any kind of spills.

- **PLAYGROUND FLOORING with KDF RAPIDFOAM PAD 868 AS SEALED, NON-POROUS SURFACES**

Combination of the prefabricated cushion sub-base **KDF RAPIDFOAM PAD 868** with a mixture of **SBR** or **EPDM** or **TPV granules** with PU Binder in thickness of 15mm and then a special PU pore sealer and PU, UV-resistance top coating.

- **PLAYGROUND FLOORING with KDF RAPIDFOAM PAD 868 AS OPEN-POROUS SYSTEM**

Combination of the prefabricated cushion sub-base **KDF RAPIDFOAM PAD 868** with a mixture of **EPDM granules** with PU Binder, on top, in thickness of 15mm.

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

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

Accounting Office
19 Mitropoleos Str
54624, Thessaloniki, Greece



PU PRIMER 870

TRANSPARENT, ONE COMPONENT, POLYURETHANE-BASED PRIMER, USED AS AN ADHESIVE COMPONENT FOR SAFEPOL MULTICOLOR 859

GENERAL CHARACTERISTICS

POLYURETHANE PRIMER 870 is a clear, polyurethane-based, one-component resin, which is used as an adhesive component between the sub-floor and **SAFEPOL** as well as between **SAFEPOL** and **SAFEPOL MULTICOLOR**.

- Penetrates in depth.
- Ideal for old and new surfaces.
- Improves adhesion of **SAFEPOL MULTICOLOR 859** on cement and asphalt surfaces and even on well-stepped, clean and dry gravel.

TECHNICAL DATA

Basis:	one-component polyurethane
Appearance:	liquid
Color:	transparent
Viscosity:	135 ± 5mPa•s at 23°C
Density:	1,049 ± 0,002 gr/cm ³
Temperature for the application and drying of the material:	12 – 35°C > 3 N/mm ² (breaking of concrete)
Adhesive strength:	

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
19 Mitropoleos Str
54624, Thessaloniki, Greece



PREPARATION-APPLICATION

Applied on dry surfaces, 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 **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 the **SAFEPOL** mixture, in order to ensure proper adhesion.
 - After application and hardening of **SAFEPOL** follows priming of the surface with **POLYURETHANE PRIMER 870** in one layer. Consumption: 200 gr/m². Similarly the primer is applied in sections of the underlay right before the application of **SAFEPOL MULTICOLOR** for the proper adhesion.
-

CONSUMPTION

200-400 gr/m² in two layers depending on the type and the absorbency of the underlay.

APPLICATION TOOLS

Nappy rolls, brushes. Tools should be cleaned with a PU solvent immediately after use.

PACKAGING

Supplied in drums of 4 Kg.

STORAGE

One year in unopened containers in cool and dry places, out of sunlight, with minimum temperature 5°C and maximum temperature 35°C.

REMARKS

- Working time of **POLYURETHANE PRIMER 870** decreases when ambient temperature rises.
 - 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.
 - Our recommendation is that the asphalt subfloor should be applied on well compacted 150 mm road base subfloor and asphalt should be laid in one layer (and not 2) in 6 to 8 cm with fine and coarse aggregates (up to 15mm granulometry) like the kind of asphalt used in road construction.
So, new road-grade asphalt will have to be laid (minimum 60mm) in one layer containing coarse aggregates and then mature for 30 days at least, before any application takes place on top of the asphalt to avoid bubbles on the final layer of the sport or rubber floorings.
-

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

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

Accounting Office
19 Mitropoleos Str
54624, Thessaloniki, Greece



PU BINDER 1178

SPECIAL POLYURETHANE BINDER

GENERAL CHARACTERISTICS

100% solids, aromatic polyisocyanate-prepolymer moisture-curing binder based on 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 **EUROPEAN SBR** 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

Test	Method	Device	Value
Density (20°C)	PK.DT.01	Pycnometer	: about 1,09±0.1 gr/cm ³
Viscosity (25°C)	PK.DT.08	NDJ-1 Rotational Viskometer	: 8000±1000 mPas
Isocyanate NCO value %	PK.DT.10	Potentiometric Titration	: 10.5±1
Colour			: Clear/pale yellow

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/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 1178** and **EUROPEAN SBR** in order to ensure proper adhesion.

- Good mixing of the **PU BINDER 1178** and the **EUROPEAN SBR 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 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. Consumption: 7kg/m²/cm.
- Small irregularities in the surface may be removed by rolling the surface using a metallic cylinder.
- Good mixing of the **PU BINDER 1178** and the **EUROPEAN SBR 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. Consumption: 7,2kg/m²/cm.
- Finally any small irregularities on the surface may be removed by rolling the surface using a metallic cylinder.
- 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.

SUBSTRATE REQUIREMENTS

Concrete quality:	at least C20/25
Age:	at least 30 days
Moisture content:	below 4%

PACKAGING

220kg in barrels.

STORAGE

One year in unopened containers in dry places with minimum temperature 5°C and maximum temperature 35°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.

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
19 Mitropoleos Str
54624, Thessaloniki, Greece



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

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

Accounting Office
19 Mitropoleos Str
54624, Thessaloniki, Greece



SBR RUBBER GRANULES 858

GENERAL CHARACTERISTICS

IT CAN BE USED IN SPORT FACILITIES SUCH AS INFILL IN SYNTHETIC GRASS WITH THE PARALLEL USE OF ROUND SAND AND ALSO AS ONE THE COMPONENT IN CASE OF CAST APPLIED WET POUR SYSTEMS FOR PLAYGROUND FLOORINGS OR AS SHOCKPAD FOR SPORT SUBFLOORS IN ATHLETIC TRACKS OR SPORT FIELDS.

Rubber granule is derived from car and truck tires. During processing, the tyres are mechanically granulated, removing all metal and synthetic fibres, 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, certified by ISO 9001 and ISO 14001.

PROPERTIES

- Totally environment friendly
- 100% recyclable
- Long life
- Resistance to adverse weather conditions
- High shock absorbency and vibration damping
- High abrasion resistance
- It is not harmful to human health

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
19 Mitropoleos Str
54624, Thessaloniki, Greece



PREPARATION- APPLICATION

- In sports facilities, playgrounds, recreational and circus to ensure flexibility of surface and vibration absorption.
- In drainage layer construction zones, in new type landfills and explosion of biogas in uncontrolled waste areas, as replacement of gravel.
- In lime and cement factories and energy production units, because of the high calorific efficiency during combustion.
- On construction of river dams under unstable conditions, in ball form,
- As replacement of various materials such as cement, gravel and protection sandbags.
- In Earth banks / dikes to reduce the noise of urban road arteries.
- As road substrate with anti-vibration and thermal insulation properties.
- On building constructions as replacement of traditional insulating materials such as extruded polystyrene, the LECA and metal slag.
- In gardens to ensure moisture.
- In shoe soles, technique implemented for recent years from Timberland company.

TECHNICAL CHARACTERISTICS

DENSITY:	1.08kg/cm ³
BULK DENSITY:	0.49g/cm ³
HEAT LOSS (ASTM D1509) kgf/cm ² :	< 1 %
METAL CONTENT (ASTM D5603):	< 0.5 %
FIBER CONTENT (ASTM D5603)-ML (Vr):	< 1 %

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
19 Mitropoleos Str
54624, Thessaloniki, Greece

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.

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
19 Mitropoleos Str
54624, Thessaloniki, Greece



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 thixotropic 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	9,87 : 1 (A : B)
Density of mixture (25°C)	1,6-1,7kg/lt
Viscosity of mixture (25°C)	40000-55000 mPa•s at 25°C
Pot-life (25°C)	30-40 min
Application temperature	Min 5°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 20°C The surface must be dry and clean. **KDF-PU 1055 PORE FILLER** can be applied by trowel.

CONSUMPTION

2 kg is used per m² (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.

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)	85 :15 (By weight)
Density (20°C)	app. 1,3±0.1 gr/cm ³
Application Temperature	Min 5°C
Curing (20°C)	8-10 hour
VOC	170 g/kg (Council Directive 1999/13/EC)
	After 12 hours you may walk over it.
	After 7 days it resists against mechanical load and chemical substances.
Color	Standard plus Colors from 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 25 °C.

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. Flammable before application.

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.