

GLOW PRO G 101 PU PRIMER

POLYURETHANE, TRANSPARENT, TWO COMPONENT PRIMER

GENERAL CHARACTERISTICS

GLOW Pro modified PU PRIMER G 101 is polyurethane-based, anti-dust, transparent , two-component resin, which is used as an adhesive component between the sub-floor and **the GLOW Pro coating G 102** which consists of GLOW Pro granules and special, modified, reinforced resins.

- Ideal for old and new surfaces.
- Eliminates dust and decay from old & new floorings, reinforcing their durability.
- Penetrates in depth, protects and hardens old absorbent cement surfaces.

TECHNICAL DATA

| | |
|--|--|
| Basis: | two-component polyurethane resin |
| Appearance: | liquid |
| Viscosity: | 180 ± 3 mPa•s at 23°C |
| Density: | 1,075 ± 0,001 gr/cm ³ |
| Mixing proportion (A:B): | 75:25 by weight |
| Final strength: | after 7 days at 23°C |
| Walkability: | after 2 days |
| Adhesive strength: | >3 N/mm ² (breaking of concrete) |
| Colors: | Transparent |
| Temperature for the application and drying of the material: | 12 – 35°C |

PREPARATION-APPLICATION

Applied only on dry surfaces. Protected from arising humidity and free of materials that might prevent bonding e.g. dust, loose particles, grease etc. The success in the application depends on the right preparation of the underlay and use of the material.

Good mixing of components A (resin) & B (hardener) packed into separate containers in fixed weight proportions. 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 uniform dispersion of the hardener.

- Grinding of the surface with a mosaic machine, or sandblast and rotor machine in case of vertical surfaces.
- **Good, dry** cleaning of the surface from dust and residues with vacuum cleaner and squeegees.
- Priming of the surface with **GLOW Pro modified PU PRIMER G 101** in one layer.
Consumption: 200-250 gr/m², depending on the absorption of the underlay.

The last layer is applied with **GLOW Pro modified PU PRIMER G 101**, until the surface is saturated and a film is created. If mat spots appear, then another layer is necessary until the surface is shiny. The next layer follows the other after the previous dries, within 6-12 hours depending on the ambient temperature and not more than 24 hours. The number of layers vary from one surface to another depending on the absorbency.

CONSUMPTION

200-250 gr/m²

APPLICATION TOOLS

Nappy rolls, brushes. Tools should be cleaned with **POLYURETHANE SOLVENT** immediately after use.

THE GLOW.PRO COMPANY

PACKING

Supplied in drums of 15 Kg and barrels of 200-220 kg.

STORAGE

Six months in unopened containers in dry places with minimum temperature 5°C and maximum temperature 28°C.

REMARKS

- Working time of **GLOW Pro modified PU PRIMER G 101** decreases when ambient temperature rises.
- It **cannot be applied in thickness for closing cracks or holes**.
- The usage of rotor machine must precede the application of **GLOW Pro modified PU PRIMER G 101** for the creation of pores and the right penetration.
- In case old floors are going to be laid or a long period of time interferes between successive layers, the surface must be thoroughly cleaned and ground prior to application of a new layer.
- 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(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.

After hardening **GLOW Pro modified PU PRIMER G 101** is completely safe for health.

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 THE GLOW.PRO COMPANY.

GLOW.PRO PU BINDER code G 116

SPECIAL, TWO COMPONENT MODIFIED POLYURETHANE BINDER WITH GLOW ELEMENTS

GENERAL CHARATERISTICS

Modified, two component, special polyurethane binder which is formulated in a way to be compatible with the **SAFEGLOW MULTICOLOUR SYSTEM** code **G 106** and help the system release the glow effect at night.

It performs in a way that lets the final coating of the **POLYGLOW PLAYGROUND** system release the glow at night, during total dark or even in lighted, areas with the parallel use of our special bulbs or spiral lights on existing lighting of the areas.

TECHNICAL DATA

| TEST | METHOD | DEVICE | VALUE |
|---------------------------|----------|--------------------------------|----------------------------------|
| Density (20°C) | PK.DT.01 | Pycnometer | about 1,09±0.1gr/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

Must be 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.

*** Always perform good mixing of components A & B of **GLOW Pro PU Binder G 116**.

Mixing should be performed using a 300-600 rpm mixer for 30 seconds.

Application procedure:

- Good, dry cleaning of the surface from dust and residues.
- Priming of the surface with the special **GLOW Pro PU Primer G 104**.

Consumption: 250 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 **SAFEGLOW SYSTEM** code **G 105** in order to ensure proper adhesion.

- Good mixing of the **GLOW Pro PU Binder G 115** and the RECYCLED RUBBER granules to form the base layer **SAFEGLOW SYSTEM** code **G 105**. 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 by hand. **Consumption:** 6kg SBR granules /m²/cm. and 1,1 kg PU BINDER for 6 kg SBR granules.
- Small irregularities in the surface may be removed by rolling the surface using a metallic cylinder.
- Then follows the application of **SAFEGLOW MULTICOLOR G 106 (GLOW Pro G 116 PU, 2 component modified binder, epdm granules and GLOW granules)** with spatulas.
- The application procedure of **SAFEGLOW MULTICOLOR G 106 (GLOW Pro G 116 PU, 2 component modified binder, epdm and GLOW PRO granules)** on top of asphalt or waterproof concrete directly without the base layer of **SAFEGLOW G 105**, is the same as for **SAFEGLOW G 105** (the mixture of **GLOW Pro PU Binder** code **G 115** and RECYCLED RUBBER).

THE GLOW.PRO COMPANY

RATIO MIXTURE FOR SAFEGLOW G 105

2,4 kg per square meter for 10kg epdm granules per 10mm plus the Glow granules.

PACKAGING

20 kg drums and barrels of 250 kg.

STORAGE

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

REMARKS

The floor must be smooth, dry and clean from oil, dirt, rust .

If ambient and surface temperatures are under 10 degrees Celsius or over 45 degrees Celsius, the optimum temperature must occur to start application.

Concrete humidity should not be above 4% and atmosphere humidity should be at least 40% and mostly 70% .To begin the application, must wait for the appropriate humidity.

Working time of **GLOW Pro PU Binder G 116** decreases when ambient temperature rises.

Prolonged storage of partially used containers containing **GLOW Pro PU Binder G 116** must be avoided as contact with atmospheric moisture will result in skinning and clouding of the product.

THE GLOW.PRO COMPANY

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 THE GLOW.PRO COMPANY.

THE GLOW.PRO COMPANY

GLOW ELEMENTS Photoluminescent pigment

CHEMICAL PROPERTIES

| | |
|------------------|---|
| Composition | Strontium Aluminate doped with Europium Dysprosium oxides |
| Insoluble in | Organic solvents, water |
| Decomposition by | Strong acids, strong alkalines |
| Fastness to heat | -40~850C° or 1100C not more than 10minutes |

PHYSICAL PROPERTIES

| | |
|-----------------------|--------------------------|
| Appearance | Yellowish crystal powder |
| Specific gravity | 3.6g/cm ³ |
| Bulk Density | 1.21g/cm ³ |
| Average Particle Size | 400~800um |

LUMINESCENT PROPERTIES

| | |
|---------------------------|--|
| Excitation | all visible light and UV light (200~450nm better) |
| Glow Color | Yellow green (Emitting light Wavelength Peak: 520±2nm) |
| Afterglow Intensity after | 10min >1100 mcd/m ² 60min >160 mcd/m ² 600min >10 mcd/m ² |

Afterglow intensity(to 0.32mcd/m2): >14000min under norm DIN67 510

LUMINANCE DATA

| Time | 10'' | 1' | 2' | 3' | 4' | 5' | 10' | 15' | 20' | 30' | 40' | 50' | 60' | 90' | 120' | 180' | 300' | 600' |
|--------------------|-------|------|------|------|------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| mcd/m ² | 21080 | 8764 | 5319 | 3843 | 3009 | 2475 | 1268 | 860.4 | 625.8 | 389.9 | 274.6 | 208.8 | 166.1 | 103.6 | 73.13 | 44.82 | 24.14 | 10.74 |

Lifespan: >15years under well packing condition.

THE GLOW.PRO COMPANY

SAFETY

1. Toxic: NO.
2. Radioactive: NO.

OTHER DATA

1. Using Condition(recommended): With all colorless, transparent medium such as paint, coating, resin, etc.
2. Storage Condition: In cool, dry and ventilated place, with temperature -50~60°C
3. Packing: 25kgs /iron pail lined with plastic bags.
G.W.: 26.6kgs, Dim: D31 x H34cm
20'Container FCL Q'ty: 11250kgs(palletized)
4. Norm Complied: EN71-3, RoHS, DGM.
5. Norm MEET: PSPA Class-G, JIS-Z9107 JD.
IMO A.752(18), ISO 23601, UL924,
ASTM E2030/E2072/E2073,
ATPA SS-PS-002-98/SS-PS-004-99,
BS 5499-1 2002, NYC Law 26

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 THE GLOW.PRO COMPANY.

SEALING COATING G 103

POLYURETHANE , TWO COMPONENT SEALING COATING WITH GLOW ELEMENTS

GENERAL CHARACTERISTICS

GLOW Pro Sealing coating G 103 is polyurethane-based, transparent, two-component resin, which helps the system to glow at night in the dark or even in lighted areas with special lamps.

It is used for sealing the GLOW Pro coating G 102 which consists of GLOW Pro sand and a special, modified, reinforced resin.

TECHNICAL DATA

| | |
|---|---|
| Basis: | Polyurethane, two-component resin |
| Appearance: | liquid |
| Viscosity: | 180 ± 3 mPa•s at 23°C |
| Density: | 1,075 ± 0,001 gr/cm ³ |
| Mixing proportion (A:B): | 75:25 by weight |
| Final strength: | after 7 days at 23°C |
| Walkability: | after 2 days |
| Adhesive strength: | >3 N/mm ² (breaking of concrete) |
| Colors: | Transparent |
| Temperature for the application and drying of the material: | 12 – 35°C |

PREPARATION-APPLICATION

Applied only on dry surfaces. Protected from arising humidity and free of materials that might prevent bonding e.g. dust, loose particles, grease etc. The success in the application depends on the right preparation of the underlay and use of the material.

THE GLOW.PRO COMPANY

Good mixing of components A (resin) & B (hardener) packed into separate containers in fixed weight proportions. 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 uniform dispersion of the hardener.

- Grinding of the surface with a mosaic machine, or sandblast and rotor machine in case of vertical surfaces.
- **Good, dry** cleaning of the surface from dust and residues with vacuum cleaner and squeegees.

The last layer is applied with **GLOW Pro Sealing coating G 103**, until the surface is saturated and a film is created. If mat spots appear, then another layer is necessary until the surface is shiny. The next layer follows the other after the previous dries, within 6-12 hours depending on the ambient temperature and not more than 24 hours. The number of layers vary from one surface to another depending on the absorbency.

CONSUMPTION

400 gr/m²

APPLICATION TOOLS

Nappy rolls, brushes. Tools should be cleaned with **POLYURETHANE SOLVENT** immediately after use.

PACKING

Supplied in packages of 5kg and 15 kg (two drums). Components A and B have the fixed weight proportion.

STORAGE

Six months in unopened containers in dry places with minimum temperature 5°C and maximum temperature 28°C.

REMARKS

- Working time of **GLOW Pro Sealing coating G 103** decreases when ambient temperature rises.
- It **cannot be applied in thickness for closing cracks or holes.**
- The usage of rotor machine must precede the application of **GLOW Pro Sealing coating G 103** for the creation of pores and the right penetration.
- In case old floors are going to be laid or a long period of time interferes between successive layers, the surface must be thoroughly cleaned and ground prior to application of a new layer.
- 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(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.

After hardening **GLOW Pro Sealing coating G 103** is completely safe for health.

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 THE GLOW.PRO COMPANY.