

Product 02277700

**Lightfast BINDER for EPDM elastic layers, 2 component PU**

## 1 General Data

### Application Fields

PORPLASTIC T777 is used for elastic sports surfaces as a binder for lightfast EPDM granule mats. Typical uses are ball game courts, multi-purpose and tennis courts, athletic tracks as well as school and other playgrounds.

### Product Description

PORPLASTIC T777 is a transparent, solvent free and lightfast two component PU-binder to be used with an accelerator. **REMARK:** the accelerator has to be ordered extra.

The viscosity of PORPLASTIC T777 effects an excellent mixing with rubber granules while there is hardly any run-off from the granules. Addition of the accelerator VIASOL PU-AC115L permits the exact adjustment of curing time and therefore application time allowing day construction joints to be easily and correctly done.

### Sports Surfacing Systems

Binder for PORPLASTIC **RACE** top layers:  
 PORPLASTIC**2S game+track**: 2-Layer-Systems  
 PORPLASTIC**EP court**: coloured EPDM-mats  
 PORPLASTIC**FUN**: top layers for playgrounds

### Technical support

For more systems and detailed information on PORPLASTIC products please refer to PORPLASTIC system and product data sheets or contact PORPLASTIC technical support directly:  
 Phone: +49 (0) 7472-937970  
 E-Mail: [info@porplastic.de](mailto:info@porplastic.de)

### (A) Technical Data

#### Liquid (Binder)

1. Density (23°C) (DIN 53217)	1.06 g/cm <sup>3</sup>
2. Viscosity (23°C)	ca. 5200 mPas
3. Packing size  2-component container:	A: 225 kg drum B: 40 kg barrel  25 kg (21,25 kg A + 3,75 kg B) VIASOL PU-AC115L has to be ordered extra!
4. Colour	transparent
5. Shelf life / Storage	12 months at 10–25°C avoid direct sunlight
6. NCO content (DIN 53185)	ca. 12,6 %
7. Mixing ratio A: B  per container A+B	85: 15 (% by weight) +VIASOL PU-AC115L  21,25 kg A + 3,75 kg B + VIASOL PU-AC115L (amount see processing)
8. Substrate and application temperature	10 – 35 °C (min. 3 °C above dew point)
9. Permissible relative humidity	min. 40% – max. 90%
10. Can be walked on (12°C + 65% rel. hum.) (23°C + 50% rel. hum.) (30°C + 75% rel. hum.)	after 24 hours after 12 hours after 8 hours
11. Setting point	5°C
12. Material consumption layer thickness 10 mm Binder EPDM (size 1 – 3 mm)	ca. 1.6 kg binder + ca. 10.6 kg EPDM

### Manufacturer:

VIACOR Polymer GmbH, Graf-Bentzel-Str. 78, D-72108 Rottenburg, Tel. +49/7472-94999-0, [info@viacor.de](mailto:info@viacor.de), [www.viacor.de](http://www.viacor.de)

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## 2 Processing Instructions

### Substrate Preparation

The dry and load bearing substrate (asphalt or concrete) has to be clean and free of loose particles and substances which impair adhesion such as oil, grease, paint or other contaminants. For achieving an optimal adhesion between the elastic mat and the substrate or SBR elastic layer it is necessary to apply a primer, e. g. PORPLASTIC P270 (PORPLASTIC P274 is imperative on concrete). The installation of the rubber granule mat should then be realized 4 – 6 hours after the primer.

### Processing

PORPLASTIC T777 is ready to use and is delivered in 2 component containers. **The accelerator VIASOL PU-AC 115L always has to be added to each mixture.**

Component B is poured completely into component A at the exact mixing ratio of 85: 15 parts by weight and stirred with a slow running mixer at 300 – 500 rev/min for 3 – 4 minutes. Then 10 – 60 g VIASOL PU-AC 115L are added with a syringe to each mixture of 100 kg A+B. For one container of 25 kg A+B we recommend – depending on ambient temperatures the addition of the following amount of accelerator:

> 20°C	ca. 30 – 50 ml
15 – 20°C	ca. 50 – 80 ml
10 – 15°C	ca. 80 – 120 ml
5 – 10°C	ca. 120 – 150 ml

The addition of the accelerator has to be done absolutely exact. The right amount of accelerator has to be determined in tests on-site.

The binder is mixed with dry EPDM granules. Use a forced mixer rotating at approximately 300 rev/min for 3 – 5 minutes. Ensure that the mixer reaches the sides and bottom areas of the mixing vessel. Processing temperature should be between 15 – 25°C.

The mixture is then spread on the prepared substrate and carefully compacted in order to achieve good surface strength by using a specially designed paving machine. Construction joints should be done before the material has significantly cured with particular attention, to avoid cracks and weak parts in these areas. Joints may be re-worked with tamper and trowel and if already cured be primed with PORPLASTIC P270 before the next installation part.

Mixing ratio of EPDM granules (1-3 mm) and binder:

**100 : 15** (parts by weight)

These proportions have to be kept as otherwise a decrease in mechanical characteristics will be the consequence.

EPDM Granules:

We only recommend the use of EPDM granules that have been tested and shown to be suitable for the application with PORPLASTIC T777.

In any case ensure that granules are dry as moisture will accelerate the curing of the binder making installation more difficult or even impossible and may result foaming in the binder, leading to an uneven surface and a weak mat.

Influence of temperature and humidity:

At low temperatures and humidity, the speed of reaction of the binder is reduced resulting in a longer pot life, re-coating interval and open time. The viscosity increases requiring increased mixing time and a higher consumption of binder.

In contrary the speed of reaction is accelerated at high temperatures and humidity and the converse is true.

When the humidity is below 40% the mat may be mist sprayed with water to avoid unacceptable curing times, which could impair the quality of the elastic layer.

### Safety Instructions

For health and safety protection, transport regulations and waste management please consider the Material Safety Data Sheet. Users are advised to wear gloves and eye protection when mixing or applying PORPLASTIC T777. PORPLASTIC T777 is non-hazardous in its cured condition.

### Disclaimer

All information in this technical data sheet is based on our current knowledge and experience. This does not release the applicator from performing their own tests as many application factors, beyond our control, affect the application of our product. No guarantee of characteristics or suitability for a special purpose can be derived from this information. All present data, descriptions, drawings, photos, ratios, weights etc. are subject to change without prior notice and do not represent contracted characteristics of the product.

Due to different materials, sub-bases and working conditions, no guarantee of an application result or any liability claims can be derived from these details or from an unwritten technical advice except for liability claims based on:

- damage to life, body or health resulting from a negligent violation of obligations or a deliberate or negligent violation of obligation of a legal representative or assistant and
- if we are charged with intention or gross negligence.

The user has to test the products for their intended use. The user is responsible for following existing laws and orders and for observing third party trade mark rights.

As all PORPLASTIC data sheets are updated on a regular basis it is the users responsibility to obtain the most recent issue (see [www.porplastic.com](http://www.porplastic.com) or contact us directly).