











# Polin PP Rub-X Binder 1004G

## **Product Description**

Aromatic polyisocyanate-prepolymer binder based on diphenylmethane diisocyanate.

# **Properties**

- cures with air humidity
- low viscosity
- solvent free
- high mechanical properties
- long cure time
- flexible end product
- permanent elasticity
- suitable for low and high temperature applications
- can be applied to larger areas

PP BINDER 1004G combines and bonds Rubber granules, polyurethane granules, cork and sponge particles. Also it is used as a primer and adhesive in different application areas.

## **Application Areas**

Children's playground, indoor and outdoor sports grounds, jogging paths, tracks and offices.

# **Technical Properties**

Test	Method	Device	Value
Density (20°C)	PK.DT.01	Pycnometer	: 1,10±0.1 gr/cm <sup>3</sup>
Viscosity (25°C)	PK.DT.08	NDJ-1 Rotational Viskometer	: 3000±1000 mPas
Isocyanate NCO value %	PK.DT.10	Potentiometric Titration	: 9.5±1
Colour	Visual	: Clear transparent brown	

# **Application Instructions**

# **Moulded in production:**

Rubber granules are highly dispersed with binder and taken into moulds. Then pressure is applied. Prior experiences show that pressure with 160 bar and mold temperature of 130 °C gives reasonable results in 12 - 15 minutes. The curing time can be shortened by addition of a catalyst. In molding applications, binder consumption should not be below %5 of SBR rubber granules.

#### **On-site applications:**

Rubber granules are highly dispersed with binder and applied to the surface by a paving machine. Construction joints should be corrected before cure . It is highly recommended that binder ratio to Rubber granules must be %20. At low temperatures, curing can be accelerated by use of catalyst.

## **Package**

200 kg. in barrels

# Storage

Under the recommended storage conditions and if protected from humidity and contaminants, i.e. in properly sealed drums, cans, etc. **PP BINDER 1004G** has a storage life of 9 months. Do not expose to direct sunlight.

#### **Important Notes**

The rubber granules must be dry as moisture will accelerate the curing of the binder making installation more difficult or even impossible and may result in the binder foaming, leading to an uneven surface and a weak mat. Surface must be sound, smooth, dry and free from oil, dirt, rust, chemicals and burr. Do not add different material to binder. In application, if ambient and surface temperatures are under +10 degrees or above +30 degrees, the optimum temperature must be waited. Concrete humidity should not be above %4, ambient humidity should be at least %40(if it is below, apply a mist spray) and most %80. Working time is influenced by the ambient, material and substrate temperature, as well as by humidity.

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The yellowing which occurs when PP BINDER 1004G is exposed to UV light does not affect its mechanical properties. It is most evident with some colours of EPDM granules. Blue granules will turn to green, grey granules may become yellow beige. These colour changes occur within the first hours, or days, after application, depending on the weather conditions. After a while the original EPDM colour appears more and more due to the abrasion of the thin layer of PP BINDER 1004G on top of the granules. It is recommended that, in the cases of sensitive colours (blue, beige etc.), a supplementary sealing is applied using the corresponding colour of light stable POLIN PU 5052S or POLIN PU 5051S. Using dark yellow, red, orange or black granules, the yellowing of PP BINDER 1004G is usually not so apparent.

## **Cautions**

Avoid skin contact with the uncured product. If swallowed, consult a physician, he may decide to wash the stomach. Safety glasses and gloves are recommended. PP BINDER is non-hazardous in its cured form.

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