PU Rubber Crumb Binder

DESCRIPTION

An MDI based polyurethane prepolymer for use as a rubber crumb binder. It has a relatively low viscosity and its fast cure speed is ideal for play areas.

This product has been formulated as a flexible moisture curing binder for in situ recycled rubber crumb shock pads and EPDM play surface top coats, which are laid by hand.

PROPERTIES

Colour: Natural

Viscosity at 23 °C: 2,800 + 500 mPa.s

NCO content ca 8 – 9 %

Application Temperature $15-40^{\circ}$ C Relative Humidity 40-90%

Cure Times 8 hours at 19°C

This binder meets the requirements of BS7188:1998 when tested on virgin EPDM rubber at 18% binder addition levels.

STORAGE

Must be stored in closed, air-tight containers - the product reacts with moisture, leading firstly to an increase in viscosity and finally gelation.

- o The containers should be kept cool
- o storage at elevated temperatures will result in a viscosity increase.

Storage life if stored under the recommended conditions: 6 months.

APPLICATION

Surface Preparation

Ensure the ground to be coated is well prepared. All loose material should be removed. Ensure the surface is free from contamination such as oil and grease. The surface should also be dry.

Shock Pad Base Layer / Top Coats

Mix rubber granules and binder at desired ratio.

Typical addition of 12% for the Base layer and 18% for the Topcoat (wear) surface.

Ensure the volumetric ratio of binder

addition is considered as the bulk density of rubbers will vary. Rubber granules should be dry in order to stop accelerated cure times and foaming of the binder.

For adequate mixing, a high torque rotary mixer should be used. Rubber and binder should be mixed for upto 5 minutes ensuring all the rubber is coated.

The product can then be laid out on a prepared surface and compacted using a hand trowel or weighted roller. Ensure an even compaction of the rubber. A release agent should be used on all tools to avoid adhesion of the binder to the tools. Ensure all equipment is cleaned well after use.

In some cases, particularly low temperatures, Rubber Crumb Binder Accelerator (1k) may need to be added.

MDI polyurethanes are subject to colour changes during exposure to ultra violet light. This will not affect the mechanical properties of the binder.

HAZARDS DURING TRANSPORT AND STORAGE

For information, please refer to Health and Safety Data Sheets for this product.