

Ref: 5473DS  
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### PU5473 Aliphatic Rubber Crumb Binder

## DESCRIPTION

PU5473 is an aliphatic polyurethane prepolymer for use as a rubber crumb binder. It has a fast cure speed and as such is ideal for play areas. PU5473 gives excellent UV resistance.

PU5473 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

Criteria	Typical Value
Colour:	Unpigmented (clear)
Viscosity at 23°C:	2500 ± 500 mPa.s
Application Temperature:	5 – 40°C
Relative Humidity:	40 – 90%
Cure Time:	5 - 6 hours at 20°C

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

Criteria	Typical Value
Tensile Strength (N/mm <sup>2</sup> )	>0.75
Elongation at Break (%)	>195%

## STORAGE

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

- The containers should be kept cool
- 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 PU5473 at desired ratio. 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 cleaner well after use.

In some cases, particularly low temperatures, D5474 Aliphatic Rubber Crumb Binder Accelerator (1k) may need to be added.

#### HAZARDS DURING TRANSPORT AND STORAGE

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