

# ENDURAGRIP PU-30WG

## DESCRIPTION

**Enduragrip PU-30WG** (replaces Enduragrip PU-20/10) is a rapid cure, 100% solids, solvent free, high build, semi-flexible polyurethane binder for use with high PSV aggregates to provide high friction surfaces on asphalt surfaces. **Enduragrip PU-30WG** is also suited for use with coloured aggregate dressings to provide a durable, industrial or decorative trafficable surface with excellent skid resistance in both wet and dry conditions.



## COLOUR

Resin: Translucent cream.

Hardener: Dark brown.

Colours: available in apple green, emerald green, safety red and other colours upon request.

## SYSTEM PROPERTIES

Binder Solids Content	100%	
Mixing Ratio	100:45 by weight (Part B:Part A)	
Coverage Rates:	Enduragrip PU-30 1-3 mm aggregate	1.6-1.8kg/m <sup>2</sup> 6-7kg/m <sup>2</sup>
	Enduragrip PU-30 0.8-1.4mm aggregate	0.7-0.8kg/m <sup>2</sup> 3-4kg/m <sup>2</sup>
Pot Life at 10°C	15 to 20 minutes	
Initial Gel Time at 10°C	20 to 25 minutes	
Cure Times at 10°C	Hard set: 4-6 hours	Full cure: 2 days
	Hard cure: upto 16 hours	

Parts A and B should be proportioned in the correct ratios in volumes that are suitable for the contract being undertaken. The hardener (Part A) should be added to the resin base (Part B) using a slow speed, high torque drill with mixing paddle for at least 3 minutes to obtain a homogenous mix. The mixed resin and hardener should be immediately applied and spread evenly using a serrated squeegee or notched trowel.

The mixed product should be allowed to level and then should be dressed to excess using the chosen aggregate. The wet binder should be broadcast with the aggregate within 10 minutes of application. The aggregate should be broadcast vertically, allowing the aggregate to "fall" onto the binder to avoid any potential lumps in the finished surface.

Steep gradients may require the addition of a thixotrope and the binder should be left open as long as possible prior to casting the aggregate. When cured sufficiently (time dependant on substrate and ambient temperature), the excess aggregate must be removed.

## COMPONENT PROPERTIES

	Part A	Part B
Appearance	Dark brown liquid	Cream liquid
Viscosity-RVT at 25°C	200 cps	3,200 cps
Specific Gravity at 25°C	1.22 – 1.24	1.05 – 1.07



## APPLICATION PROCEDURE

All surfaces should be prepared in accordance with the Surface Preparation Data sheet prior to application of this product.



## PACKAGING

16 kg kits

## Bulk Supply:

Pt.A 200L drum 250 kgs  
Pt.B IBC 1000 kgs



## STORAGE HANDLING PRECAUTIONS

AND

## ADDITIONAL INFORMATION

Should a clear sealer be required, please discuss with a PGL technical adviser.

**All chemical materials should only be used by trained personnel.**

Store in sealed containers at 5-30°C

### SHELF LIFE

12 months minimum

### CURED PROPERTIES

Shore Hardness	DIN 53505	60+/-5 D
Tensile Strength	DIN 53455	13 -14 N/mm <sup>2</sup>
Young's modulus from tensile test	DIN 53455	65-70N/mm <sup>2</sup>
Elongation	DIN 53455	60-65%
Adhesion to steel Pull test method	DIN 53232	26N/mm <sup>2</sup> (265Kg/cm <sup>2</sup> );
Tear propagation test acc to Graves	DIN 53515	35 KN/m
Taber Abrasion resistance (CS 10/1000rpm/1000g) In mg	DIN 53754	75
High Temperature Flow*:	Enduragrip PU-30WG is a THERMOSET material and after curing does not soften or flow with heat.	

\*Thermoset vs Thermoplastic:

A polymer which becomes irreversibly hardened upon being cured is a thermoset polymer. Curing results in extensive cross-linking between polymer chains to give an infusible and insoluble polymer network. Once hardened a thermoset resin cannot be re-melted in order to be reshaped, this can be contrasted with thermoplastic polymers, which can generally be re-melted and reshaped.



## HEALTH AND SAFETY ADVICE

Refer to Polymer Group Safety Data Sheets before using products.

**Part A [isocyanate]** is a polymeric isocyanate, based on 4,4-diphenylmethane diisocyanate (pMDI). It is moderately toxic. **Avoid contact with skin or eyes, avoid breathing vapour** and use only in well ventilated areas.

**Part B [polyol]** is a mild irritant.

Use **Enduragrip PU-30WG** with adequate ventilation. Only trained personnel allowed in work room during spraying.



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