

ENDURAGRIP PU-30

DESCRIPTION

Enduragrip PU-30 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-30** 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.



SURFACING TYPE

Solvent free polyurethane resin surfacing system for asphalt substrates.

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

SYSTEM PROPERTIES

Binder Solids Content	100%	
Mixing Ratio	100:45 by weight (Part B:Part A)	
Coverage Rates:	Enduragrip PU-30 1-3mm aggregate	1.6-1.8kg/m ² 6-7kg/m ²
	Enduragrip PU-30 0.8-1.4mm aggregate	0.7-0.8kg/m ² 3-4kg/m ²
Mixed	Semi-translucent cream colour	
Specific Gravity at 20°C	1.11 g/mL	
Pot Life at 25°C	15 to 20 minutes	
Initial Gel Time at 25°C	20 to 25 minutes	
Cure Times at 25°C	Hard set: 3-4 hours	Full cure: 2 days



APPLICATION PROCEDURE

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

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 the 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.



PACKAGING

16 kg kits plus aggregate

Bulk Supply:

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

COVERAGE RATE

14.4m² at 1mm thickness per 16kg kit.

STANDARD COLOURS (IBC)

Available in apple green, emerald green and safety red.

COLOUR PACKS for 16kg kits

Colours available Concrete Grey (7035), Medium Grey (7042), Dark Grey (7015), Beige (1001), White, Black, Yellow, Green, Red & Blue.

Add 550mLs to 850mLs (4% - 6% by volume) Pigment Paste DINP per kit to hide any patchiness showing through from the substrate.



STORAGE HANDLING PRECAUTIONS

AND

ADDITIONAL INFORMATION

A catalysed version is available for use in temperatures below 15C – **Enduragrip PU-30 WG**.

All chemical materials should only be used by trained personnel.

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

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/mm2
Young's modulus from tensile test	DIN 53455	65-70N/mm2
Elongation	DIN 53455	60-65%
Adhesion to steel Pull test method	DIN 53232	26N/mm2 (265Kg/cm ²);
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-30 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-30** with adequate ventilation.



Rev 4 Nov 2022

POLYMER GROUP LTD

PO Box 204 106 Highbrook, Auckland 2161, New Zealand Telephone: 64-9-274 1400 Fax: 64-9-274 1405
Email: sales@polymer.co.nz www.polymer.co.nz