

Pure Step PU®-40 Polyurethane Clear

Exterior / Interior Clear Polyurethane Gloss

PRODUCT

DESCRIPTION

Pure Step PU-40 Polyurethane Clear is a 36% volume solids, glossy clear coating that is tough and fast curing. It is normally applied directly over suitably prepared concrete as a clear sealer to produce a beautiful, durable gloss finish that is easily cleanable.

INTENDED USES

- Commercial, industrial, residential flooring and walls
- Food processing plants flooring and walls
- Hospital flooring and walls
- Car Parks
- Driveways

FEATURES

- Excellent UV resistance
- Fast cure and rapid return to service
- Good wear resistance with high flexibility
- Easy to clean
- Good chemical spot resistance
- Good potlife

PRODUCT DATA

Volume Solids	36%
Theoretical Coverage	7.2 m ² . L @ 50 Microns DFT
Finish	Clear
Colour	Colourless
Gloss	Gloss
Mixing Ratio	4:1 by volume
Potlife	4 Hours @ 25°C
Typical Thickness	30 - 50 Microns Dry or 83 - 139 Microns Wet
Cleaner	LM1 Thinner
Flash Point	27 °C
VOC	567 Grams/Litre
Specific Gravity	0.96

CURE & RECOAT

Substrate Temp	Tacked	Hard Dry	Full Cure	Minimum Recoat Time	Maximum Recoat Time
10°C	10 Hrs	20 Hrs		10 Hrs	36 Hours
15°C	5 Hrs	10 Hrs		5 Hrs	24 Hours
25°C	2.5 Hrs	5 Hrs	3 Days	2.5 Hrs	12 Hours
40°C	1 Hr	2 Hrs		1 Hr	4 Hours

Notes:

^{*}Minimum cure time for light foot traffic is 12 hours, vehicular traffic is 24 hours

^{*}If the maximum recoat time is exceeded the coating must be sanded before applying the next coat

POTLIFE

Mixed Product Temperature	Gel Time
10°C	12 Hours
15°C	8 Hours
25°C	4 Hours
40°C	2 Hours

LIMITATIONS

- Tyres may mark this coating. A test on site should determine the coatings tyre-marking resistance to a particular type of tyre
- Pot life is dependent on mix temperature
- Thin-film dry times are dependent on temperature and film thickness
- Thicker films will take longer to cure through
- Maximum self-recoat time without sanding is 12 Hours at 25°C
- Higher cure temperatures and direct exposure to the sun will shorten the recoat times

SURFACE PREP Concrete

The concrete should be at least 28 days old. Ensure that the moisture content of the concrete is less than 7% before applying any coatings. A moisture test as outlined in ASTM D4263 'Standard Test Method for Indicating Moisture in Concrete by the Plastic Sheet Method' can be used to confirm the moisture content.

Prepare concrete surface through abrasive blasting, mechanically grinding it or floor shot blasting. Any laitance or other invisible contaminants must be removed. Ensure that the concrete surface is clean, dust free and dry.

APPLICATION

Mixing

Always stir PU-40 Polyurethane Clear Part A well before use.

Mix (by volume) 4 Parts of PU-40 Polyurethane Clear Part A with 1 Part of PU-40 Polyurethane Clear Part B hardener (4:1). Do not vary from this ratio. Do not attempt to part mix and make up the entire mix.

Equipment

Large and small areas:	Preferred method is Roller
Alternative application:	Conventional Spray
Airless Spray:	Not suitable

Environment

Relative humidity:	The relative humidity must be less than 85%
Dew point:	The substrate temperature must be at least 3°C higher than
	the dew point temperature
Substrate Temperature:	The substrate temperature must be a minimum of 5°C

Thinning

PU®-40

LM1 Thinner may be used to thin PU-40 Polyurethane Clear. Thinning of PU-40 Polyurethane Clear is not normally necessary. Depending on the application equipment and finish desired, thinners may be added to a maximum of 10% mixed Part A and Part B.

Clean-Up

LM1 Thinner may be used for general clean-up of equipment.

Concrete

Mix all components well and apply with a suitable paint roller or air spray equipment. Apply an initial sealer coat of PU-40 Polyurethane Clear sealer to soak in and seal the concrete. Work the product well into the concrete to seal the open pores. Do not pond PU-40 Polyurethane Clear but roll out any areas with an excess of sealer. Then apply one coat of PU-40. The maximum self-recoat time of PU-40 is 12 hours at 25°C. PU-40 must be sanded if the maximum recoat time is exceeded.

If desired, apply a second coat of PU-40 Polyurethane Clear. After the initial sealing coat, two topcoats of PU-40 are normally required to get an appropriate build of the topcoat.

COMPATIBILITY

Primers	Aralox-FL150 Clear		
	PU-40 Polyurethane Clear		
Topcoats	PU-40 Polyurethane Clear		
	PU-40 Polyurethane Pigmented		

Typical Systems

Substrate	Environment	Substrate Prep	Coat	System	DFT
Concrete	Floor Interior	Abrasive Blast	1 st Coat 2 nd Coat 3 _{rd} Coat	Aralox-FL150 PU-40 PU-40	200μ 50μ 50μ
Concrete	Exterior	Abrasive Blast	1 st Coat 2 nd Coat 3 _{rd} Coat	PU-40 PU-40 PU-40	100μ 50μ 50μ

STORAGE & HANDLING

Store in dry, shaded conditions away from sources of heat and ignition and in properly sealed containers. Protect from heat and frost. Protect contents from moisture. A shelf life of 12 months minimum is typical with unopened containers if stored at ambient conditions at 25°C. If either component is opened and partially used, it should be purged with nitrogen or desiccated air and resealed.

PACK SIZE

4L Kits

3.2L of PU-40 Part A in a 20L Container 0.8L of PU-40 Part B in a 20L Container

HEALTH & SAFETY

PU-40 is for professional use only. PU-40 is flammable. This product should not be used without consulting the Safety Datasheet (SDS) as published on the Liquimix website first.

DISCLAIMER

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