



## **PUR-S60 ALIPHATIC POLYURETHANE**

### **Pigmented coating**

#### **DESCRIPTION**

Two-component protective coating, formulated with polyurethane resins and polyfunctional aliphatic isocyanate hardener, resulting in a product of extraordinary hardness and physical-chemical resistance for the protection of surfaces.

It should be applied on clean dry surfaces and is especially suitable for the decoration and protection of all kinds of surfaces, iron or steel, concrete or wood, especially where a maximum resistance to ageing is desired, whether it is weathering or chemical agents. It can be used to improve the resistance of tiled floors, stabilize floors which are breaking down, to protect skirting boards, warehouse floors, swimming pool beach area, garages, workshops, indoor and outdoor floors.

#### **ADVANTAGES**

- ✓ Good adhesion on cement and concrete.
- ✓ High abrasion resistance, hard wearing.
- ✓ Highly resistant to solvents and chemicals.
- ✓ Excellent colour and gloss resistance.
- ✓ Indoor and outdoor use.
- ✓ Anti-dust effect.

#### **CHARACTERISTICS:**

- ✓ Excellent surface adhesion
- ✓ When used outdoors, it is recommended to apply the product pigmented
- ✓ Very good resistance to water and chemical agents
- ✓ Acid resistance: very good
- ✓ Salt resistance: excellent
- ✓ Smoke resistance: excellent
- ✓ Good thermal stability
- ✓ High mechanical strength
- ✓ Abrasion resistance: very good
- ✓ Solids content by volume: 50%.
- ✓ Density of the mixture: 1.200 gr/cm<sup>3</sup>

- ✓ Acid number: 1
- ✓ Application: excellent
- ✓ Recommended dry film thickness: 50 microns per coat

#### RECOMMENDED USES

When used to paint concrete floors in garages, warehouses, workshops, car parks, industrial buildings, etc., the result is a dust-free, mark-resistant floor with a uniform appearance and an elegant finish.

Particularly suitable for the decoration and protection of all kinds of surfaces, iron or steel, concrete or wood, especially where maximum resistance to ageing, weathering or chemical agents is desired. It can be used to improve the resistance of tiled floors, stabilize floors which are breaking down, to protect skirting boards, warehouse floors, swimming pool beach area, garages, workshops, indoor and outdoor floors.

### **PRESENTATION**

Available in grey, red, green, white, TR base and according to RAL chart.

Gloss finish.

Formats of 4+1 and 16+4 Kg.

#### TECHNICAL CHARACTERISTICS

**Composition:** Fixed vehicle polyurethane resins catalysed with isocyanates.

Pigments: mineral and organic.

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Solvent: Hydrocarbon blend

**Density:** 1.15 +/- 0.02 kg/L

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**Solids volume:** 50+/- 2%

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**Coverage:** 0.150 kg to 0.200 kg per coat.

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Drying: Touch dry 45 minutes

Total 6 hours

Repaint after 12 hours, maximum 48 hours

Light vehicle transit: 24 hours Normal transit: 48 hours

**Working life:** Maximum 1 to 1.5 hours.

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**Recommended thickness:** 50 microns dry per layer

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**Thinning:** first coat 10 %, subsequent coats 5-10 %, with polyurethane thinner.

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**Application temperature:** between 10 and 30 °C.

#### APPLICATION

**Layers:** 2 to 3 coats depending on the colour, with a coverage of 0.150 kg per coat.

**Product mix:**

#### APPLICATIONS:

- Mix the two components on site by means of conventional mixing equipment, i.e. components "a" and "b" must be perfectly homogenised using a mechanical mixer until a perfect blend is achieved in order to obtain best results and perfect drying.
- The chemical reaction starts immediately after mixing, which increases the viscosity gradually until the product gels. Useful life is about 1/2 hour. Therefore, the two components should be stored separately and moments before application, the mixture should be checked.
- Application can be carried out by any standard procedure: brush, roller, spray, etc.

#### APLICACIÓN

- Dilution and cleaning of tools must be with our polyurethane solvent
- Yield depending on the type of surface on which it is applied, 1 kg. can yield between 3 and 6 mt<sup>2</sup> approx.
- Final hardness is acquired approximately 24 hours after application
- Satin finish
- Product should be applied to clean dry surfaces

#### HANDLING INSTRUCTIONS:

- ✓ Containers should be kept away from sources of ignition. Do not smoke during handling
- ✓ Take necessary precautions against electrostatic charge
- ✓ Store containers upright, in a cool ventilated place
- ✓ Polyurethane does not contain any easily degradable isocyanate compounds and therefore does not irritate the respiratory organs. However, when spraying, the respiratory organs must be duly protected against spray mist, as with epoxy paints and lacquers, the corresponding protective measures such as the use of masks, etc. must be taken.
- ✓ When applying the product, the use of gloves is recommended. Although it does not damage the skin, it adheres in such a way that it is very difficult to remove even with special solvents.
- ✓ Avoid contact with eyes.

## **SURFACE PREPARATION**

Surfaces must be dry, free of grease and impurities, and it must be applied at a floor temperature above 5°C.

Surface porosity must be sufficient to allow adequate penetration and anchorage of the paint. Best results are obtained using mechanical methods which regulate the porosity of the substrate and eliminate any unwanted substance or foreign body.

If mechanical treatment is not possible, at least one chemical treatment must be carried out to eliminate foreign or undesired agents using dilute hydrochloric acid and then thoroughly washing with water. Allow the substrate to dry completely before proceeding with normal painting.

### **Painted surfaces:**

If the paintwork is well adhered, sand with a rotary sander, vacuum to remove loose particles, then clean and degrease.

On satin-finished surfaces, sand and vacuum.

Apply a coat of water-based epoxy primer, PR EPOXW 20, as a bonding primer on substrates with a relative residual humidity of 3 to 6% to the substrate.

On substrates with a residual moisture content of less than 3%, apply as a primer. PR EPOX -100S 100% solids colourless primer at 0.200kg per m<sup>2</sup>.

### **Unstable surfaces:**

If the paint is old or badly adhered with defects such as chalking, blistering, chipping, cracking, etc, remove the remains mechanically, repair cracks or flaws and apply a coat of PR EPOX -100S 100% solids colourless primer.

### **IMPORTANT:**

In high humidity conditions or below 10°C, THE PRODUCT DOES NOT SET. Do not apply to very hot substrates exposed to direct sunlight.

Surfaces in general should be clean, dry and free of grease, dust and rust. Floors must be clean, dry and well cured (28 days) Residual floor moisture must be less than 6%.

Preferably, the surface should be roughened to improve adhesion.

On unpainted surfaces, apply 2 or 3 coats (the first diluted to 30%) On surfaces with old paint, remove unstable paint and proceed as for unpainted surfaces.

Consumption is approximate and will depend on the condition of the surface being painted. For other application systems, please consult our technical department.

Surface tensile strength should be  $> 1.5 \text{ N/mm}^2$  and moisture content  $< 4\%$ . Concrete must have an open porous structure for good penetration of the primer.

We recommend preparing the substrate by polishing, grinding or shot blasting..

**COLD MATERIALS:** When dealing with epoxy resins and urethanes, cold material will result in slower than normal cure times and may affect physical properties once cured. Cold materials are more difficult to mix, apply and level. Before materials are applied in cold temperatures, they should be stored in a heated environment or in a heated storage container at the ideal temperature indicated on the Product Data Sheet. The longer the materials can be stored in a heated environment, the better they will perform.

**- COLD ENVIRONMENT TEMPERATURES:** This condition will also cause slower than normal cure of epoxy and urethane materials. It will also make them more difficult to apply and level. It can cause bubbling/blistering as the viscosity of the epoxy has increased due to the colder temperatures, preventing the vapour trapped in the substrate from escaping. Prior to application, the temperature in the application area should be at normal service temperature for a minimum of 48 hours. If necessary, use portable heaters.

**- COLD SURFACE TEMPERATURES:** Concrete surfaces at  $10^\circ\text{C}$  or below will drastically slow the normal curing of epoxies and urethanes and can reduce cure by up to 6 hours or more. It can also affect the physical properties of cured membranes, making some epoxies flexible. Cold substrate temperatures can prevent epoxies from "wetting" or penetrating the concrete surface, leading to adhesion problems. Prior to application, service temperatures should be at normal operating conditions, a minimum of  $15^\circ\text{C}$ , for a minimum of 48 hours. If necessary, use portable heaters.

**- BASEMENTS, SPACES WITH LITTLE VENTILATION:** in spaces with little ventilation or basements, the relative humidity due to condensation reaches levels which may seriously affect the finish, from condensation in the environment to the curing of the product.

**- RECOMMENDATIONS:**

1. Use ventilators before and during application and during curing time.
2. Use a heat gun covering the whole area. It will help to eliminate humidity, reaching a temperature of both the support and the environment suitable for curing.
3. Do not apply epoxy, polyurethane, acrylic, under any circumstances below  $10^\circ\text{C}$ .
4. The substrate and ambient temperature must be at least  $3^\circ\text{C}$  above dew point during application.

**HOT SUBSTRATES OR MATERIALS:** Substrates exposed to high temperatures exceeding  $26^\circ\text{C}$  directly affect the physical and chemical properties of the materials. The direct effects will depend on the nature of the material and may include cracking, micro cracking, orange peel, accelerated drying with loss of properties, colour changes, loss of levelling, etc.

**- RECOMMENDATIONS**

Do not apply at ambient temperatures above  $25^\circ\text{C}$ .

Do not apply outdoors during the warmest hours.

Do not expose the materials to high temperatures or store in direct sunlight. Do not apply if the substrate temperature is above  $30^\circ\text{C}$ .

#### STORAGE

Mixes easily up to 12 months storage in a closed container by vigorous shaking. Does not form skin, clots or gels. Protect from temperatures below 0 °C.

#### SAFETY

#### HEALTH, SAFETY AND THE ENVIRONMENT

In general, avoid contact with eyes and skin, wear protective gloves, goggles and appropriate clothing. Keep out of reach of children. Use only in well-ventilated areas. Do not empty into drains. Keep container tightly closed and in a suitable place. Ensure proper transport of the product; prevent any accidents or incidents that may occur during transport due to breakage or deterioration of the container. Keep the container upright in a safe place. Do not use or store the product in extreme temperature conditions. Always take into account the legislation in force concerning the Environment and Health and Safety at Work. For further information, it is essential to read the PRODUCT SAFETY DATA SHEET. It is advisable to periodically check the update status of this Datasheet.

Pinturas Pinay assures the conformity of its products with the specifications given in the technical data sheets. The technical advice given by Pinturas Pinay, before or after delivery of the products is merely indicative and given in good faith and constitutes its best knowledge, in accordance with the current state of the art, but without guarantee on the final results, which depend on conditions of use that are beyond our control. All sales are subject to our general conditions of sale, which we advise you to read.

See labelling and Safety Data Sheet.



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