



Technical data sheet

PROTECTION MADE EASY

Polyguard

Description and destination of the product

Polyguard is a one-pack moisture curing polyurethane paint, pigmented with specific inert lamellar pigments. Thanks to the special lamellar structure of the pigmentation, a very tight paint film is obtained with excellent water and corrosion resistance. The inert pigmentation and the polyurethane binder provide a high chemical resistance.

These properties make it possible to apply **Polyguard** as coal tar free alternative where normally coal tar products are used.

Polyguard is especially recommended for immersion circumstances (seawater).

Type of binder

Moisture curing aromatic polyisocyanate prepolymers.

Type of pigment

Micaceous iron oxides, magnesium silicates and iron oxide.

Colour

Black.

Gloss

Mat

Technical data

- **Density:** 1.55 ± 0.05 g/cm³ (20°C)
- **Solids content:** 82 (± 2%) in weight
66 (± 2 %) in volume
- **Viscosity:** 110 (± 5) KU at 20°C
- **VOC:** < 295 g/L (not diluted)
< 420 g/L (15 % diluted)
- Indicative drying times (R.H. 75%) for 80 micron layer thickness:

	Dustdry	Tackfree	Dry
10°C	2.5 hours	4 hours	8 hours
20°C	1 hour	2.5 hours	6 hours
30°C	40 minutes	1.5 hour	4 hours

- **Theoretical yield:** 7.5 m²/L for 80 micron
6.0 m²/L for 100 micron
4.0 m²/L for 150 micron

The practical yield can largely be influenced by the roughness and porosity of the substrate, the applied layer thickness or the losses by airless application.

Surface preparation

When the waiting time between the successive coats is abnormally prolonged or in extremely polluted areas, the primed surface can become contaminated. All contaminations that hamper the adhesion of the paint should be removed by appropriate means.

Surfaces contaminated with oil and grease should be washed down with solvent, alkaline solutions or emulsifier.

Salt deposits or other water-soluble contaminations should be removed with water and brush, water under high pressure or steam. Possible white rust on zinc dust primers should be removed with water and rigid nylon brush.

Polyguard can be applied on top of a primer (**Polyzinc, Monoseal, Polysilco**)

Recommended system for immersion circumstances (seawater):

- Preparation : blasting SA 2.5
- Primer : **Polyzinc YHA 1105**, 50 micron
- Finish : **Polyguard**, 3 x 80 micron

Use

Polyguard can be applied by brush, roller, pneumatic or airless pistol.

	% Dilution	Thinner	Pressure (bar)	Nozzle
Brush	5 – 10 %	Thinner 1	-	-
Roller	5 – 10 %	Thinner 1	-	-
Pneumatic gun	10 – 15 %	Solvatane	3 to 5	1.2 to 1.5 mm
Airless gun	5 – 15 %	Solvatane	100 to 300	0.017" to 0.024"

At extreme temperatures, air humidity circumstances or air movement, **Thinner 1** can be preferred when applying by pistol.

It is always recommended to treat corners, sharp edges, bolts and nuts before applying a uniform coat.

Indicative recoatable times (R.H. 75 %) for 80 micron dry layer thickness :

	Minimum	Maximum
10°C	24 hours	up to 3 months
20°C	6 hours	up to 1 month
30°C	4 hours	up to 1 week

At longer intervals a good cleaning is necessary to avoid intermediate coat contamination which could disturb the adherence of the next coat. The recommended layer thickness is 60 to 100 microns, depending on the system.

The material can be cleaned with **Solvatane** or **Thinner 1**.

When applying a paint layer with an airless system, it is recommended to use **Additive MCU HB**.

Application conditions

Polyguard can be applied at temperatures between 0°C and 35°C and air humidity between 30 to 98 %. The temperature of the surface must be 3°C higher than dew point

Storage stability

Minimum 2 years in the original, unopened package stored in a dry environment at temperatures between -20°C and +40°C.

Safety measure

For detailed information about safety measures, personal protection and transport data of this product, we refer to the safety data sheet.

The last update of our technical data sheets is always available at our website: www.libertpaints.be

Disclaimer

The information given in this technical data sheet is only a general product description, based on our experiences and tests and therefore does not represent a specific practical case. Consequently Libert Paints doesn't guarantee the functionality or result and takes no responsibility in this respect.

We advise our clients to test the applicability of the product to the nature and the state of the surfaces and to carry out the necessary representative tests in case of doubt. Please contact our R&D department as the occasion arises.

Attention: our clients should verify whether the present technical data sheet hasn't been replaced by a more recent version.