



Technical data sheet

PROTECTION MADE EASY

Polyfloor

Description and destination of the product

Polyfloor is a one-pack polyurethane paint, especially designed as floor coating, in view of its high abrasion and chemical resistance. Just as for any other floor paints, the following should be kept in mind:

- the type and actual state of the floor
- a good impregnation

On which floors:

- Adequate substrates for **Polyfloor** are: concrete, screed, concrete tiles, cement tiles
- Surfaces that absorb soil water are inadequate.

Type of binder

One-pack moisture curing polyisocyanate prepolymers.

Type of pigment

Barium sulphate, silicates and iron oxides or other colour pigments.

Colour

Grey (\pm RAL 7038) and oxide red. For larger quantities, all RAL colours are available.

Gloss

60-70% (Gardner 60°)

Technical data

- **Density:** 1.38 (\pm 0.05) g/cm³
- **Solids content:** 68 (\pm 3) % in weight
50 (\pm 3) % in volume
- **VOC:** 431 g/L
- **Theoretical yield:** 4 to 6 m²/L for 50 micron dry
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

The floor must be sufficiently dry and fully cured. A concrete floor should be 8 to 12 weeks old. All dirt, loose particles and laitance should be removed.

Oil spots should be cleaned thoroughly and repeatedly with a detergent or with thinner (for example **Thinner 1**). Especially oil spots that have penetrated the surface, can migrate to the surface and cause adhesion loss. Floors that have been cleaned regularly with oil containing soap, should be scrubbed thoroughly with a NaOH-solution.

Reparation of holes: can be done as follows: apply a mixture of dry sand with **Polyfloor Primer** in the holes. For deep holes a ratio of 6 parts dry sand and 1 part (volume) **Polyfloor Primer** is recommended. Use a ratio of 4/1 for smaller holes. Before repairing the holes, an impregnation coat **Polyfloor Primer** should be applied.

Curing compounds on polyconcrete must always be removed by track blasting. Laitance on new concrete must always be removed by

- mechanical etching with undiluted hydrochloric acid (3 L hydrochloric acid in 10 L water). Let dry for 10 minutes and rinse thoroughly with water
- by track blasting.

Use

1. **Pigmented floors**

a. **Impregnation with Solfix**

This impregnation coat is a two-pack polyurethane. The yield varies according to the porosity of the surface and is ± 150 to 250 gr/m^2 .

Application: by brush or long hair roller.

Drying times (40 micron – 20°C)

* Dustfree	:	1 ½ hours
* Tackfree	:	5 hours
* Recoatable	:	6 hours
* Maximum waiting time	:	7 days

At longer waiting times, the impregnation coat should be roughened up and cleaned with **Thinner 1**

Clean materials with **Thinner 1**.

b. **Polyfloor**

Application: by brush, roller coater or airless sprayer.

Drying times (40 micron – 20°C)

* Dustfree	:	1 to 1 ½ hours
* Tackfree	:	4 to 8 hours
* Dry-hard	:	12 hours
* Ready for light traffic	:	20 hours
* Full resistance	:	4 days

Apply $100\text{-}200 \text{ g/m}^2$ ($4\text{-}8 \text{ m}^2/\text{L}$), depending on the surface.

Number of coats: 1 or 2 depending on the colour, state of the substrate and hiding power requirements.

Minimum waiting time between 2 layers is 14 hours.

Maximum waiting time between 2 layers is 36 hours.

If the waiting time between two layers is more than 36 hours and if heavy loads (fork trucks) will be used on that floor, sanding (fine grain) is always recommended. After sanding, cleaning with **Thinner 1**.

Clean materials with **Thinner 1**.

2. **Transparent coat on concrete**

a. Impregnation coat **Polyfloor Primer**

This impregnation coat is a one-pack moisture curing polyurethane. The yield varies according to the porosity of the surface and is 2 to 6 m²/L.

b. One or two layers **Polyglas** (one-pack) or **Duroglas** (two-pack)

Apply 100 to 200 g/m² (4-8 m²/L), depending on the surface.

Drying times (40 micron – 20°C)

* Dustfree	:	1 to 1 ½ hours
* Tackfree	:	4 to 8 hours
* Recoatable	:	12 hours
* Ready for light traffic	:	24 hours
* Full resistance	:	4 days

Minimum waiting time between 2 layers is 14 hours.

Maximum waiting time between 2 layers is 3 days.

When the waiting time is longer, the first layer should be roughened up and cleaned with **Thinner 1**.

Application: by brush, roller coater or airless sprayer.

3. **Very dirty floors**

a. Impregnation coat **Polyfloor Primer**

Ditto as 2.a.

b. Coloured or transparent coats

Ditto as 1.b or 2.b

c. Transparent topcoat **Polyglas** or **Duroglas**

Ditto as 2.b

Application conditions

Minimum temperature : 5°C

Maximum temperature : 50°C

Minimum humidity degree : 40 %

Maximum humidity degree : 90 % (no condensation on the surface during application or drying)

Storage stability

Minimum 2 years in the original, unopened packing 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.