

SURFACE HARDENER

Qualiroc

HIGH-HARDNESS WEARING COURSE FOR FREQUENTLY USED INDUSTRIAL FLOORS

TECHNICAL DATA SHEET

Rev. Aug. 2026

PRODUCT DESCRIPTION

QUALIROC is a surface hardener applied in the finishing of concrete floors.
It is composed of very hard mineral aggregates and a hydraulic binder enriched with admixtures.

BENEFITS

- Cost-effective
- Resistant
- Dust-resistant
- Non-rusting - requires no special treatment

APPLICATION AREAS

- Industrial floors with light to medium traffic
- Shops
- Warehouses
- Workshops
- Commercial premises

CONSUMPTION

The **QUALIROC** floor hardener is applied at the following rates:

Application	Consumption (kg/m²)
Manual dry-shake broadcasting	3 to 7
Mechanical dry-shake broadcasting	3 to 7
Incorporated mortar (hydrated layer)	minimum of 12

TECHNICAL CHARACTERISTICS

QUALIROC has the following technical characteristics:

Characteristic	Unit	Standard	Result
Compressive strength*	MPa	-	≥ 50
Flexural strength*	MPa	-	≥ 6
Abrasion resistance*	cm³/50 cm²	EN 13892-3	< 9
TABER abrasion resistance* (H-22 / 1000 cycles / 1000 g)	g	ASTM C-501	3.00

* Physical data measured on a specially prepared test specimen

FLOOR MAINTENANCE

To preserve the properties of cement floors in the long term, regular maintenance is recommended.

HEALTH AND SAFETY

As with all powdered products, the use of a dust mask and gloves is recommended.

METHOD OF USE

Concrete Specification:

The concrete must be prepared with a minimum cement content of 300 kg/m³ and with a suitable aggregate to obtain the desired mix. For a better result, the inclusion of plasticizers is recommended.

The entrapped air in the concrete must be below 3%.

QUALIROC must be applied as soon as possible over concrete that will bear the weight of a person (footprint test). This normally occurs after 4 to 12 hours, depending on weather conditions.

Preparation:

Large concrete areas should be prepared using an automatic spreader. For smaller areas, the use of a scraper squeegee and screeds will provide a suitable surface.

APPLICATION OF QUALIROC

QUALIROC must be applied over a fresh layer of concrete by manual and/or mechanical dry-shake broadcasting (Topping Spreader) and as incorporated mortar (hydrated layer).

Manual Dry-Shake Broadcasting:

- To optimize the result, manual broadcasting must be carried out in two stages.
- The first layer must be broadcast evenly at a rate of 2 to 4.5 kg/m² (2/3 of the total dose).
- Once the applied **QUALIROC** has absorbed all the moisture, the surface must be floated with the aid of a hand float at the corners and edges and then with a power float for the main surface.
- Immediately afterwards, apply the second stage of **QUALIROC** at a rate of 1 to 2.5 kg/m² (1/3 of the total dose).
- After the second layer of **QUALIROC** has absorbed the moisture, proceed with floating as in the first stage.
- A smooth, hard surface is obtained with a power trowel fitted with finishing blades. For light colors, stainless steel blades must be used.

Mechanical Dry-Shake Broadcasting:

- Mechanical broadcasting is carried out in a single pass.
- Broadcast evenly at a rate of 3 to 7 kg/m².
- Once **QUALIROC** has absorbed all the moisture, the surface must be floated with the aid of a hand float for the corners and edges and then with a power float for the main surface.
- A smooth, hard surface is obtained with a power trowel fitted with finishing blades. For light colors, stainless steel blades must be used.

Hydrated Layer

- Add 3 to 3.5 liters of water per 25 kg bag of **QUALIROC** in a vertical-shaft mixer (pan mixer) until a homogeneous paste is obtained.
- Apply over concrete at a minimum rate of 12 kg/m² and level to the required thickness with the aid of a hand float for the corners and edges and subsequently with a power float for the main surface.
- A smooth surface is obtained by using a power trowel fitted with finishing blades.

Floor Curing

The QUALIROC surface must be protected from premature water evaporation to prevent cracking and for full strength development.

Curing of the concrete must be fully completed before the floor is used. The following periods must be strictly observed:

Floor use	Period
Pedestrian traffic	7 days
Light traffic	14 days
Release for use	28 days

STORAGE AND CONDITIONS

QUALIROC is supplied in 25 kg bags. Provided they are kept in their original packaging, protected from moisture and exposure to the weather, in a dry place, they have a shelf life of 6 months, the same as cement.

Use the products immediately after opening.

Note:

Based on our laboratory tests, in-depth technical studies and our field experience, the indications and recommendations contained in this technical data sheet are nevertheless not absolute, owing, for example, to variations in mixing, consolidation or curing.

Legal Notice:

Owing to the different materials, substrates and working conditions, no guarantee of results or adhesion, of any kind and/or of a legal nature, can be assumed.
Please note that the information in the technical data sheet may vary from country to country.

Reference translation of the Portuguese technical data sheet (dated August 7, 2026). In case of discrepancy, the Portuguese version prevails. Translation by Maxim, October 2026.