N. 220 - REV. 03/2025

# SFERODUR 2-5

FIBER-REINFORCED POLYMER CONCRETE FOR THICKNESSES FROM 1.5 TO 3 cm



#### **DESCRIPTION**

Cementitious, premixed, fiber-reinforced concrete with structural polymer fibers with controlled expansion, resistant to aggressive agents to the environment. SFERODUR 2-5 is a premixed cementitious mortar containing polymer fibers.

### FIELDS OF USE.

SFERODUR 2-5 is ideal for:

- Restoring old floors by anchoring to the substrate with acrylic or epoxy adhesion bridges, where excellent resistance to vehicular traffic and handling is required inside and outside industrial buildings used for logistics, transportation and production;
- Restoration of outdoor areas ruined by frost or heavy traffic;
- Docks of ports and airport areas;
- SFERODUR 2-5 is particularly suitable for computerized storage floors with high traffic density. It allows good flatness to be achieved by the placement of striker guides and subsequent treatment;
- SFERODUR 2-5 is used as a screed in combination with DECOQUARZ and DECOSTAMP for stamped floors.

## **PACKAGING**

25 kg polythene paper bags.

#### **CONSUMPTION**

Indicative consumption 30kg/m<sup>2</sup> per cm thickness.

## **MIXING RATIO**

13 liters of clean water per 100 kg by weight of SFERODUR 2-5 (weight ratio of about 18%).

## **FEATURES AND ADVANTAGES**

- Less micro-cracking and prevention of concrete shrinkage contrast;
- Easy mixing;
- Reduction of thicknesses at the same load.
- Reduction of curling phenomenon.
- Homogeneity of screed strength even at critical points such as joints;
- SFERODUR 2-5 is designed to restore old concrete floors and worn areas without having to demolish the existing concrete;
- It can be applied on minimum thicknesses between 15 and 30 mm:
- No reinforcement is required;
- Can also be pumped;
- Resists marine corrosion very well;
- It is easy to apply and can be pigmented; We use Bayer's inorganic-type pigments because they provide color stability over time and resist alkali in cement:
- Resists cracking in the plastic phase counteracted by the introduced fibers that also improve its longterm cracking resistance, which is a basic requirement for durability.
- Operating temperature: +50°C to -30°C.

## **CERTIFICATIONS**

SFERODUR 2-5 complies with UNI EN 13813: materials for screeds (DoP No. 220). ISO 9001 certified quality management system (Certificate No. IT.17.0227.01.QMS). APSE S.r.I. is an active member of CONPAVIPER.









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#### SUBSTRATE PREPARATION

- Milling of concrete substrate and subsequent sweeping of debris materials;
- Cleaning of debris and vacuuming with a vacuum bin;
- Any structural cracks must be closed with AP 300 FIX grout with placement of reinforcing mesh;
- High-pressure hydro-washing (alternatively saturation wetting);
- Application of APSECOL RESIN epoxy adhesive at a rate of 800g/m2 depending on the substrate.

## PRODUCT PREPARATION.

To obtain a high-density mortar free of segregations and of uniform quality, it is important to comply with the water/cement ratio given in the "MIXING RATIO" section. Mixing with a concrete mixer is recommended.

## **METHOD OF APPLYING THE MIX**

- After mixing the concrete mix, spread on the surface with straightedge pulled to run on prepositioned level guides;
- Wait for walkability and dust if necessary;
- Helicopter work with fine blade or bull float smoothing:
- Making cuts at least 3 cm deep and sealing joints.

## **CURING**

Protect the surface immediately after finishing with APSERING AQ or METALCRIL 12 and after 24 hours wet thoroughly and cover with a polyethylene sheet for 7 days. Refer to the table below for curing times (at +20°C):

Workability time	35 min.
Setting time	60 min.
Walkability	7 days
Complete curing	28 days

## **CLEANING OF TOOLS**

Clean with water when product is fresh. Mechanically after curing.

#### **WARNINGS**

Do not use if the bag is damaged.

Do not add additives unless specified by the manufacturer.

Do not add water when the product has started setting.

#### **HEALTH AND SAFETY WARNINGS**

For information on safety regulations, hazard statements and cautionary advice, rely on the latest MSDS by making a request to: ufficiotecnico@apsebg.it

#### **STORAGE**

Shelf life of 6 months when stored in original packaging in a dry, moisture-free place. Store at temperatures between +5°C and +35°C.

#### **DISPOSAL**

Dispose of contents and/or container in accordance with local regulations.





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#### **TECHNICAL DATA**

PHYSICAL CHARACTERISTICS (at +20°C)

CHARACTERISTIC	NORMATIVE	RESULT
Appearance	-	Fine powder
Consistency of the mixture	-	Thick
Color of the mixture	-	Grey
pH of the mixture	EN 13454-2	12±0,5
Bulk density (powder)	EN 1015-6	1,5 ± 0,1 g/cm <sup>3</sup>
Dough density	EN 1015-6	1.940 kg/m <sup>3</sup>

### PRESTAZIONI DEL PRODOTTO IN ACCORDO ALLA UNI EN 13813

CHARACTERISTIC	NORMATIVE	RESULT
Compressive strength at 28 days	EN 13892-2	≥ 66,8 N/mm <sup>2</sup>
Flexural strength at 28 gg	En 13892-2	≥ 8,50 N/mm <sup>2</sup>
Abrasion resistance Böhme	EN 13892-3	3 cm <sup>3</sup> /50cm <sup>2</sup>
Reaction to fire	EN 13501-1	A1 <sub>fl</sub>

The data given above are information obtained from our best technical knowledge, application, and research experience. However, since we are unable to intervene directly in site conditions and work execution, they represent general indications that do not bind APSE S.r.l. in any way. - V&V Group. The information given does not relieve the purchaser of his responsibility to personally test our products as to their suitability with regard to their intended use. The customer is also responsible for verifying that this data sheet is valid for the batch of product of interest to him and is not outdated as superseded by later editions. If in doubt, contact our Technical Department in advance. APSE S.r.l. - V&V Group reserves the right to make technical changes of any kind without prior notice. This revision cancels and supersedes all previous ones, all under the continuous verification of data according to the new current Standards and our ISO 9001 management system. Please feel free to check the most up-to-date version of this Data Sheet on our website: <a href="https://www.apse.it">www.apse.it</a>

