Acrydur® 510 Terrazzo

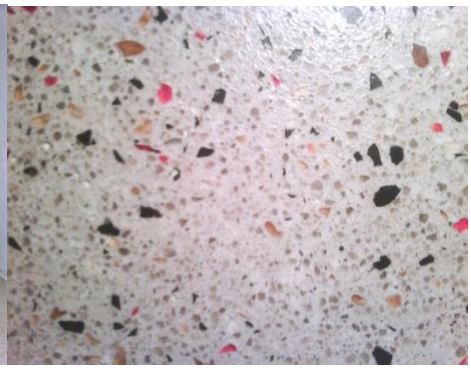
Low-viscosity, elastomer-modified resin for the production of resin terrazzo flooring

PLASTI CHEMIE International GmbH

Application:

Due to its low viscosity, Acrydur® 510 is especially suitable for producing terrazzo flooring with a low resin-to-aggregate ratio.





Properties:

Acrydur® 510 terrazzo flooring is suitable for interior areas subject to medium and heavy service conditions. The system provides excellent aging resistance and wear resistance. To achieve optimum wear performance, the specified mix proportions must be followed precisely. A wide variety of decorative color effects can be achieved. Locally available aggregates, stone chips, granules, or recycled glass provide designers and applicators with extensive options for customizing the finished appearance. A major advantage of Acrydur® 510 terrazzo over conventional cementitious or epoxy terrazzo systems is its rapid installation. The surface can be ground as early as 2 hours after installation. In addition to fast installation, Acrydur® 510 terrazzo provides high abrasion resistance and good chemical resistance.

Properties of the Resin as Supplied:

Property	Test Methode	Approx.Value
Flow Time at 23°C, 4 mm	DIN EN ISO 2431	20- 30 s
Refractive Index nD^{20}	DIN EN ISO 53491	1,44
Density D^{20}	DIN EN ISO 1183-1	0.97 g/cm^3
Flash Point	DIN EN ISO 51755	+10 °C
APHA Color	APHA	< 50
Pot Life at 20°C	approx. 10 min	
Cure Time at 20°C	15-25 min at (20°C	
Appearance	Liquid, violet	
Shelf Life	Max.6 months when stored in a dark place below 20°C	
Packaging	180 kg drum 25 kg, 10 kg pails	

Acrydur® 510/1
Terrazzo Flooring,

Plasti-Chemie International GmbH
Falgardring 1
D – 08223 Falkenstein / Germany
Telefon: +49 (0) 37 45 / 744 32-0
Telefax: +49 (0) 37 45 / 744 32-27
Email: info@plasti-chemie.de
Internet: www.plasti-chemie.de

0.197-0.591
(5 – 15 mm):

This formulation allows terrazzo flooring up to 15 mm thick to be installed in a single application over concrete previously primed with Acrydur® 112. The finished terrazzo flooring provides high resistance to mechanical loads and must be sealed after installation.

Approx. Consumption per 0.039 in. (1 mm) of Layer Thickness:

17 pbw	Acrydur® 510	0,4 kg/m²
83 pbw	Acrydur® Mortar Mix No.C2	1,8 kg/m²
0.6 pbw	Acrydur® Hardener Powder	0,013 kg/m²

The Acrydur® 510 base mixture may be pigmented to obtain the desired color. When dry pigments are used, add approximately 5-10 wt%.When pigment pastes are used, approximately 2-5 wt% may be added.(Hardener quantity is calculated based on the amount of Acrydur® 510 resin)

Processing:

Premix Acrydur® 510 and the hardener powder. Then add Acrydur®Mortar Mic No. C2 and, if required, the pigment. Mix for approximately 3 minutes using a forced-action mixer. Install the terrazzo flooring using a screed bar or straightedge and a finishing trowel. For decorative effects, up to 50 wt% of additional aggregate with a particle size of 5-10 mm may be incorporated into the mixture. The mortar mixture must be thoroughly compacted during installation. Avoid entrapped air, as it may interfere with proper curing.

Properties of the Cured System:

Property	Test Method	Approx.Value
Compressive Strength	DIN EN 197-1	~34 N/mm²
Flexural Strength	DIN EN 197-1	~24 N/mm²
Elastic Modulus	DIN EN ISO 527	~ 4350 N/mm²
Binder Consumption per 1 mm, Recommended Formulation	-	~0,4 kg/m²
Total material Consumption per 0.039 in. (1 mm), Recommended Formulation	-	~ 2,2 kg/m²
Water Absorption, 4 Days	DIN EN ISO 53 495	0 mg
Vicat Softening Temperature	DIN EN ISO 306	~ 48 °C
Ball Indentation Hardness	DIN EN ISO 2039-1	~ 41 N/mm²
Coefficient of Thermal Expansion	DIN EN ISO 60216-1	~40·10^{-6}K^{-1}

Due to the aggregate grading of the quartz-sand mortar mix, the system can only be installed at layer thicknesses greater than 4 mm .

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Pot Life and Cure Time vs. Temperature:

Temperature	Hardener [Vol%]	Pot Life [min]	Cure Time [min]
5°C	3.0	approx. 25	approx. 70
10°C	2.0	approx. 20	approx. 60
20°C	2.0	approx. 20	approx. 55
30°C	0.5	approx. 20	approx. 50

- Hardener quantity calculated based on the amount of Acrydur® 510
- Temperature refers to resin, substrate, and ambient air temperature

Notes: Do not apply subsequent coats until the previous coat has fully cured.

Grinding: The Acrydur® 510 terrazzo flooring can be ground as early as 2 hours after installation using diamond grinding equipment, preferably by wet grinding. After the first grinding pass, apply a pore-filling scratch coat to fill pores and voids in the terrazzo surface.

Pore-Filling Scratch Coat:

95 pbw	Acrydur® 112
5 pbw	Acrydur® Aerosil 200
9.50 pbw	Color Pigment
0.5 pbw	Acrydur® Hardener Poeder 50 W *

After the scratch coat has fully cured, grind the surface back until a uniform aggregate distribution and surface texture are visible again.

Sealing: Apply two coats of Acrydur® 522 to the cleaned terrazzo surface using a roller. The maximum application rate is 0.40 kg/m^2 per coat, for a total maximum of 0.80 kg/m^2
After the first sealer coat has dried, lightly sand the surface once with a 100-grit sanding screen. Once the second sealer coat has fully cured, sand and polish the surface.

Initial Floor Care: After the terrazzo has been completely ground and polished, apply a self-polishing floor finish as the initial maintenance we recommend DREITUM DURO TOP.

Routine Maintenance: For routine cleaning and maintenance, we recommend

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Storage: Acrydur® methacrylate resins are highly flammable and must be handled accordingly. Store in a cool place, away from direct sunlight, preferably at 15 – 20 °C. During storage, paraffin particles and fillers may settle. Therefore, containers must be thoroughly mixed before use. Please refer to the current Safety Data Sheet.

Industrial safety: Provide adequate ventilation during work. During processing, observe the regulations of the Hazardous Substances Ordinance, the instructions of the Federal State Committee for Occupational Safety and Safety Technology (LASI), and our safety data sheets.

VbF: A I

GISCODE: RMA 10

HS-Code: 3208 2010

CE

Plasti Chemie International GmbH • Falgardring 1 • 08223 Falkenstein • Germany

EN 13813, SR-B2, 0-AR0, 5-IR12

Acrydur® 510

Synthetic Resins for Indoor Use
(Application in accordance with the latest technical information)

Reaction to Fire:	E_{fl}
Wear resistance (abrasion resistance):	AR 0.5
Impact resistance:	IR 12
Tensile strength:	B 2.0

CE- Labeling

Data concerning our products and devices as well as concerning our data and procedures are based on an extensive research work and an application technology experience. We obtain these results, with which we do not take over adhesion going beyond the respective single contract, in word and writing after best knowledge, reserve ourselves we however technical changes in the course of the product development. Beyond that our application technology service stands when desired for large consultation as well as for co-operation with the solution manufacturing and application technology problems for order. That does not relieve the user however to examine our data and recommendations before their use responsible for the own use. That applies - particularly for deliveries to foreign markets - also regarding the keeping of patent rights third as well as for applications and procedures, which are not expressly in writing indicated by us. The case of loss our adhesion is limited to indemnifications of same extent, as they plan our general terms of delivery and sales with lack of quality.

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