Plastifloor® 522 (GB)

Low-viscous, slightly violet
methacrylic resin for hard sealings

PLASTI CHEMIE International GmbH

Characterization: Acrydur® 522 is a newly developed hard methacrylic resin of low viscosity, preferably used as a sealer for Acrydur® coatings to improve heavy mechanical and scratch resistance as well as maintenance. The main application areas are trowel-smoothed industrial floors made of Acrydur® 510 and Acrydur® 418.

Acrydur® 522 excels in:

- improved self-leveling qualities
- minimal yellowing
- high scratch resistance by using hardener/M
- excellent chemical resistance
- high thermal endurance
- low tendency to staining

Charasteristic of the resin as delivered:

Property	Measuring method	Approx. value
Viscosity at 23 °C	DIN EN ISO 2555	70-120 mPa · s
Flow time at 20°C, 4 mm cup	DIN EN ISO 2431	26-32 sec
Density D^{20}	DIN EN ISO 1183-1	0.93 g/cm³
Pot life at 20°C	ca. 10 min	
Curing	20-30 minutes (20°C and 1% hardener)	
Form of delivery	liquid, slightly violet	
Shelf-life	dark at < 20°C, 6 months maximum	
Bundle	180 kg drums 25 kg, 10 kg pails	

Charasteristic of the resin in the hardened state:

Property	Measuring method	Approx. value
Strain at break	DIN EN ISO 527	~ 3%
Tensile strengh	DIN EN ISO 527	~ 40 MPa
E-modul	DIN EN ISO 527	2065 MPa
Water absorption, 4 days	DIN EN ISO 53 495	100 mg
Shore-A	DIN EN ISO 7619-1	95-102 Units
Shore-D	DIN EN ISO 7619-1	75-85 Units

Application: Stir up well all Acrydur® resins before application! Pour the required preparation amount into a mixing pail and stir in hardener 50W for approx. 1 minute by using a suitable agitator. Acrydur® 522 is preferably applied crosswise with short hair rollers (mohair) in a layer thickness of max. 0.4 mm (~ 400 g/m²). Layer thickness must be at least 0.2 mm (200 g/m²) and should not exceed 0.5 mm (500 g/m²)

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

with 2 layers – depending on the desired coating structure (smooth or coarse).

Special remarks: After stirring in the hardener, the sealer is poured out onto the floor and immediately dispersed evenly. Sealings with Acrydur® 522 should not be applied onto coatings with Acrydur® 332 as the coating's high flexibility in combination with the very hard sealer Acrydur® 522 might cause cracking on loading. Hardener concentrations of > 2 % can cause discolorations (yellowing). Furthermore, a waiting time of about 2 hours between the coating's curing and the application of the sealer has proven to be effective. Despite the good chemical resistance of Acrydur® 522, a reduced resistance must be expected when sealing coatings based on Acrydur® 418 or 510. With these solvents (in case of continuous exposure), swelling by diffusion may occur after some time. This process depends on the sealer's layer thickness. In these cases, we recommend a layer thickness of 0.5 mm minimum or better a double application of Acrydur® 522. Continue the coating work only after the previous layer has completely cured. It has been proven that intermediate sanding of the coating before applying the sealer increases the intermediate adhesion and levels any unevenness (lumps, knobs)

Preparation

8 L Acrydur® 522
0.08 L hardener powder 50 W or 0.16 L hardener / M

Pot life and curing time at different temperatures:

Temperatur [°C]	Hardener [Vol%]	Hardener [wt%]	Pot life [min]	Curing time [min]
+5	2.0	7.4	ca. 30	ca. 60
+10	1.5	4.9	ca. 20	ca. 45
+20	1.0	2.5	ca. 10	ca. 40
+30	1.0	2.5	ca. 8	ca. 20

- Hardener quantity calculated according to Acrydur® 522
- Temperature refers to resin, surface and air temperature

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

Attention: At temperatures below 0°C, the resin must be placed in a warm environment before processing – at least 5°C and with addition of up to 2% hardener. In general, accelerators cannot be added to sealers – neither as thinner or as accelerators – due to yellowing.

Storage: Methacrylate resins are subject to the handling regulations of highly flammable materials. Acrydur® resins must be stored cool, at temperatures between 15 – 20° C and protected from direct sunlight. Paraffin particles may be deposited during storage. Therefore, materials must be stirred thoroughly before processing.

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-labelling

CE	
Plasti Chemie Produktionsgesellschaft mbH • Falgardring 1 • 08223 Falkenstein • Germany	
EN 13813, SR-B2, 0-AR0, 5-IR12	
Acrydur® 522	
Synthetic resins for internal uses (Application in accordance with the newest technical information)	
Reaction to fire:	E_{fl}
Wear resistance (Abrasion Resistance):	AR 0.5
Impact resistance:	IR 12
Tensile bond strength:	B 2.0

data concerning our products and tools as well as concerning our data and procedures are based on extensive research work and application-technical experience. We procure these results in word and writing to our best knowledge but do not assume liability going beyond the respective single contract. However we reserve the right to technical alterations in the course of product development. This does not absolve the user from testing our products and procedures on their qualification for his purposes. The same goes for ensuring property rights of thirds as well as for applications and procedures that have not been explicitly given by us in writing.

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