

Plastifloor® 522 (USA)

Low-viscous, slightly blue methacrylic resin for hard sealings

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

Plastifloor® 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

Characteristic of the resin as delivered:

Property	Measuring method	Approx. value
Viscosity at 73 °F	DIN 53 015	70-120 mPa · s
Flow time at 68°F, 4 mm cup	DIN 53 211	26-32 sec
Density D ⁶⁸	DIN 51 757	0.93 g/cm ³
Pot life at 68°F		ca. 10 min
Curing		20 - 30 min (at 68 °F and 1% hardener)
Form of delivery		liquid, slightly bluish
Shelf-life		dark at <68°F 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	EN ISO 527	~3%
Tensile strength	EN ISO 527	~26.76 MPa
E-modul	EN ISO 527	1042 MPa
Water absorption, 4 days	DIN 53 495	100 mg
Shore-D	DIN 53 505	75-85 Units

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Processing Notes:

Processing:

Stir up well all Plastifloor® resins before use! Pour the required amount into a mixing pail and stir in hardener 50W for approx. 1 minute using a suitable agitator. Plastifloor® 522 is preferably applied crosswise with short hair rollers (mohair) in a layer thickness of max 0.4 mm (~ 14.11 oz/ft²). The layer thickness must be at least be 0.2 mm (5.22 oz/ft²) and should not exceed 0.5 mm (13.04 oz/ft²) with 2 coats – 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 distributed evenly. Sealings with Plastifloor® 522 should not be applied on top of coatings with Plastifloor® 332, because the high flexibility of the coating in combination with the very hard sealer Plastifloor® 522 can lead to cracks under load. Hardener concentrations of > 2 % may cause discoloration (yellowing). Furthermore, a waiting time of about 2 hours between the curing of the coatings and the application of the sealer has proven to be effective.

In spite of the good chemical resistance of Plastifloor® 522, a reduced resistance must be taken into account when sealing coatings based on Plastifloor® 418 or 510. With these solvents (under continuous load), swelling by diffusion can occur after some time. This process depends on the thickness of the sealing layer. In these cases, we recommend a minimum thickness of 35 mesh (0.5 mm) or better a double application of Plastifloor® 522.

Do not apply the next coat until the previous coat is completely cured. Intermediate sanding of the coating prior to application of the sealer has been shown to increase intermediate adhesion and level out any irregularities (lumps, bumps).

Suggested formulation:

2.113 gal Plastifloor® 522
2.71 oz Hardener 50 W or 5.41 oz Hardener M

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Pot life and curing times depending on temperature:

Further coats of Plastifloor® should be applied only after the previous coat has completely cured.

Temperatur [°F]	Hardener [Vol%]	Hardener [wt%]	Pot life [min]	Curing time [min]
+ 41	2.0	1.3	ca. 30	ca. 60
+ 50	1.5	1.0	ca. 20	ca. 45
+ 68	1.0	0.7	ca. 10	ca. 40
+ 86	1.0	0.7	ca. 8	ca. 20

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

Attention: Hardener levels below 1 vol. % can cause polymerization failure!

Attention: At temperatures below 32 °F, the resin must be placed in a warm environment prior to processing - minimum 41 °F and up to 2% hardener added. Generally, accelerators cannot be added to sealants – either as thinner or as an accelerator – due to yellowing issues.

Storage: The handling regulations for highly flammable materials apply to methacrylate – resins. Plastifloor® resins should be stored cool, away from direct sunlight and preferably at temperatures between 59 - 68 °F (15 – 20 °C). During storage, paraffin particles and fillers may precipitate. Therefore, containers must be well agitated before use. Please refer to our Safety Data Sheets.

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.

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VbF: A I
GISCODE: RMA 10
HS-Code: 3208 2010

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

CE-labelling

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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Plasti Chemie Produktionsgesellschaft mbH
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