Plastifloor® 523 Additive

Low-viscosity, slightly bluish-coloured
Methacrylate resin for hard sealing

PLASTI CHEMIE International GmbH

Properties:

Plastifloor® 523 additive is a newly developed hard methacrylic resin of low viscosity that is preferably used as a sealer for Plastifloor® coatings to improve heavy mechanical and scratch resistance as well as maintenance. The main application areas are trowelled industrial floors made of Plastifloor® 510 and Plastifloor® 418. Plastifloor® 523 advantages:

- Improved self-levelling
- Minimal yellowing
- Excellent chemical resistance
- Increased solvent resistance
- High thermal resistance
- High scratch resistance with Hardener/M
- Low tendency to stain

Characteristics of the resin and additive as delivered:

Plastifloor® 522

Property	Measuring Method	Approx. value
Viscosity at 23 °C	DIN 53 015	70-120 mPa · s
Flow time at 20°C, 4 mm cup	DIN 53 211	26-32 sec
Density D^{20}	DIN 51 757	0.93 g/cm^3
Pot life at 20°C	ca. 10 min	
Curing	20-30 min. (20°C and 1% hardener)	
Form of Delivery	liquid, light Violet	
Shelf-life	dark at < 20°C, 6 months maximum	
Bundle	180 kg Drums 25 kg, 10 kg Pails	

Plastifloor® Additive 523

Property	Measuring Method	Approx. value
Flash point	ISO 2719	> 135 °C
Water solubility at 25 °C	OECD Test Guideline 105	15 mg/l
Surface tension at 20 °C	OECD Test Guideline 115	38.6mN/m
Viscosity at 20 °C		1.280 mPa · s
Relative density at 23 °C		1.109
Form of Delivery	Liquid, colorless to light yellow	
Shelf-life	6 Months, Storage Temperatur: < 45 °C	
Bundle	10 kg, 5 kg Canister	

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Processing:

Stir up all Plastifloor® resins well before application! Pour the required amount into a mixing pail and stir in Plastifloor® Additive 523 for approx. 1 min by using a suitable agitator. After stirring in the Plastifloor® Hardener 50 W (1 min), the sealer is poured out onto the floor and immediately spread out.

Plastifloor® 523 is preferably applied crosswise with short hair rollers (mohair) in a layer thickness of up to 0.4 mm max (~ 400 g/m²).

Coating thickness must be at least 0.2 mm (200 g/m²) and should not exceed 0.5 mm (500 g/m²) with 2 coats – depending on the desired coating structure (smooth or coarse).

Scratch and water resistance can be improved by using Hardener/M. Hardener/M result in a matte surface. Please refer to the product data sheet.

Mixing approach:

8 L Plastifloor® 522
0.2 L Plastifloor® Additiv 523
0.08 L Plastifloor® Hardener 50W / 0,16 L Plastifloor® Hardener/M

Material consumption:

300 - 400 g/m²

Curing time:

Do not continue coating until the previous coat has completely cured.

Temperatur [°C]	Hardener [Vol%]	Hardener [wt%]	Pot life [min]	Curing time [min]
+ 5 to + 10	2.0	1.3	ca. 35	ca. 50
+ 10 to + 20	1.5	1.0	ca. 30	ca. 40
+ 20 to + 25	1.0	0.6	ca. 25	ca. 35
+ 25 to + 30	1.0	0.6	ca. 20	ca. 30

- Hardener quantity calculated on amount of Plastifloor® 523 (Hardener 50 W)
- The temperature specifications are based on resin, soil and air temperature

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Attention:

At temperatures below - 0°C, the resin must be placed in a warm environment before processing - minimum 5°C and add up to 2% hardener maximum. Generally, accelerators cannot be added to sealers – either as a thinner or as an accelerator – due to yellowing issues.

Notes:

Sealings with Plastifloor® 523 should not be applied onto 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 % can cause discoloration (yellowing). Furthermore, a waiting time of about 2 hours between the curing of the coating and the application of the sealer has proven to be effective.

Despite the good chemical resistance of Plastifloor® 523, a reduced resistance must be expected when sealing coatings based on Plastifloor® 418 or 510. With these solvents (in case of continuous exposure), swelling by diffusion may occur after some time. This process depends on the thickness of the sealer. In these cases, we recommend a minimum thickness of 0.5 mm or better a double application of Plastifloor® 523.

Storage:

Methacrylate resins are subject to handling regulations for highly flammable materials. Plastifloor® resins must to be stored cool, at temperatures between 15 – 20° C and protected from direct sun light. Paraffin particles may be deposited during storage. Therefore, materials must be stirred thoroughly before processing the mixture. Please refer to our Safety Data Sheet.

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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	
Plastifloor® 523 Additive	
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

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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