

Acrydur™ 523 Additive

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

PLASTI CHEMIE
Produktionsgesellschaft mbH

Characteristics: Acrydur™ 523 additive is a newly developed hard methacrylic resin of low viscosity that is 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™ 523 excels in:

- Improved self-levelling
- Minimal yellowing
- Excellent chemical resistance
- Increased Solvent resistance
- High thermal endurance
- High scratch resistance by using Hardener/M
- Low tendency to staining

Characteristic data:

Acrydur™ 522

| | | |
|---------------|--|---------------------|
| Delivery form | Liquid, violet | |
| Flow time | 26-32 s | 20 °C (4mm DIN cup) |
| Density | 1,00 g/cm ³ | DIN 53217 |
| Flash point | + 10 °C | DIN 51755 |
| Curing time | 30-40 min | 20 °C (1% Hardener) |
| Shelf life | In the original container, closed, dry, cool, frost-free max. 6 months | |
| Bundle | 25 kg, 10 kg pails 180 kg barrels | |

Acrydur™ Additive 523

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|---------------|--|-------|
| Delivery form | Liquid, transparent | |
| Flow time | 600 mPas | 25 °C |
| Density | 1,01 g/cm ³ | 25 °C |
| Shelf life | In the original container, closed, dry, cool, frost-free max. 6 months | |
| Bundle | 10 kg, 5 kg cans | |

Processing notes:

Processing: Stir up well all Acrydur™ resins before application! Pour the required preparation quantity into a mixing pail and stir in Acrydur™ Additive 523 for about 1 min by using a suitable agitator. After stirring in the Acrydur™ hardener 50 W (1 min), the sealer is poured out onto the floor and immediately dispersed evenly.

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

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

Scratch and water resistance can be ameliorated by using hardener/M. Hardener/M leads to a mat surface. Please mind the indications on the product data sheet.

Mixing approach: 8 l Acrydur™ 522
0,4 l Acrydur™ Additiv 523
0,08 l Acrydur™ Hardener50W/0,16 l Acrydur™ Hardener/M

Material consumption: 300 - 500 g/m²

Curing time: Continue the coating work only after full hardening of the previous layer.

| Temperature [°C] ** | Hardener [Vol-%] * | Pot time [min] | Curing time [min] |
|---------------------|-----------------------|-------------------|----------------------|
| + 5 to + 10 | 2 | ~ 35 | ~ 50 |
| + 10 to + 20 | 1,5 | ~ 30 | ~ 40 |
| + 20 to + 25 | 1 | ~ 25 | ~ 35 |
| + 25 to + 30 | 1 | ~ 20 | ~ 30 |

* Hardener quantity calculated on amount of Acrydur™ 523 (Hardener 50 W)

** The temperature specifications are based on resin, soil and air temperature

Attention:

At temperatures below 0°C, the resin needs to be put into a warm environment before processing - minimum 5°C and add up to 2% hardener maximum. Basically accelerator cannot be added to sealers – neither as thinner nor as accelerator – due to yellowing aspects.

**Additional
Information:**

Sealings with Acrydur™ 523 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 % may cause discolorations (yellowing). Furthermore, a waiting time of about 2 hours between the coating's curing and the application of the sealer has proven.

Despite the good chemical resistance of Acrydur™ 523, one must reckon a reduced resistance when sealing coatings based on Acrydur™ 418 or 510. With these solvents (on continuous loading), a swelling by diffusion may take place after some time.

This process depends on the sealer's layer thickness. In these cases, we thus recommend a layer thickness of 0.5 mm minimum or better a double application of Acrydur™ 523.

Storage:

Methacrylate resins are subject to the handling regulations of highly flammable materials. Acrydur™ resin has to be stored cool, at temperatures between 15 – 20° C and protected from direct sun.

During storage paraffin particles can be deposited. Therefore, materials have to be stirred thoroughly before processing the mixture. Please note the advice of our safety datasheet.

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.