



RESINS FOR FLOORING

METHYL METHACRYLATE FLOORING SYSTEMS



HIGH-
QUALITY
RESINS FOR
SUSTAINABLE
COATING
SOLUTIONS.

RESINS FOR FLOORING

OUR RESINS FOR FLOORING
OFFER GREAT DURABILITY EVEN
IN EXTREME CONDITIONS.

GOLDEN RESINS

We produce around 70,000 tons of liquid resins annually, including coating and composite resins. Our coating resin brands – DOMACRYL, DOMOPOL, DOMALKYD, DOMEMUL, DOMOPUR, ATRESIN, ATRELUX and ATRETHIX – have achieved a strong market position and are trusted for their quality and performance. With the combined strength of two strong production companies, ATCOAT and Helios Resins, we serve more than 50 countries worldwide. Our production sites in Germany and Slovenia allow us to deliver our quality resins throughout Europe and beyond. A broad product portfolio, intensive R&D and innovation capabilities, high production flexibility, and superior customer service are the strengths of Helios Resins and ATCOAT as a joint specialist for synthetic resins.

SUSTAINABLE APPROACH

By developing advanced, green, and long-lasting materials, we reduce emissions of hazardous organic solvents, incorporate bio-renewable raw materials and create a potential for energy savings. Our sustainable approach encompasses the production of bio-based materials, water-based resins, high solids, BPA non-intent resins, recycling, and participation in EU initiatives. We are the first in Slovenia to be ISCC Plus certified and offer several products made from sustainable raw materials that are certified in all parts of the value chain back to the point of origin. A sustainable future matters greatly to us, our business, and our customers. We are proud to see this reflected in the EcoVadis Gold Medal we received for our sustainability performance.

DEVELOPED WITH ADVANCED TECHNOLOGIES

Our laboratories and production facilities are fully equipped with the most advanced technologies, which enables the development and production of even the most complex solvent and waterborne resins. Our R&D has advanced skills as well as equipment for polyester and acrylic chemistry, including synthesis under pressure. By continually upgrading our production lines and expanding our production capacities, we can meet the most rigorous and complex needs and demands of our customers.

QUALITY OF SERVICE

We are committed to providing a flexible and reliable service while satisfying our customers' specific requests. Helios Resins and ATCOAT ensure the quality, stability and reproducibility of every delivery. Our extensive know-how, resulting from more than 100 years of experience, enables us to provide solutions to our customers' challenges. We produce tailor-made resins for specific needs and offer support in developing customized applications.



VERSATILE AND DURABLE RESINS

Methyl methacrylate (MMA) systems provide versatile flooring options, especially suitable for areas where a quick return to service is needed. The system of three resins (primer, base coat, and topcoat) can be applied at the temperatures below 0 °C, and it offers the durability to withstand even extreme conditions.

USE OF MMA FLOORING SYSTEMS

- Food processing facilities
- Retail
- Pool decks
- Driveways and walkways
- Sports and educational facilities
- Hotels and restaurants
- Industrial facilities
- Laboratories

BENEFITS OF MMA FLOORING

- UV stability
- Low maintenance
- Excellent chemical, water, and abrasion resistance
- Very fast curing, even at low temperatures
- Outstanding strength capabilities
- Low degradation
- Slip resistance
- Antimicrobial properties
- Low VOC



PRIMER

Ready to use primer based on Domacryl 9922

- Low viscosity
- Domacryl 9922 contains a paraffin wax which tends to float after prolonged storage. The resin must be homogenized before use by stirring.
- Domacryl 9922 is amine pre-activated.

NO.	COMPONENT	MASS %	MATERIAL TYPE
1.	DOMACRYL 9922	100	MMA resin
Total		100	

Primers can be broadcasted to ensure a better bond of subsequent layer. In this case we recommend adding a wetting and dispersing additive (like BYK-W 969). This ensures a better wetting of sand. Systems with fully broadcasted Domacryl 9922 are not recommended as surface can become wrinkled.

Hardener

NO.	HARDENER	WEIGHT % (in respect to resin)	POT LIFE	CURING TIME
1.	BENZOYL PEROXIDE (BPO)	2%	8–10 min	30–35 min

Application

- Surface to be coated needs to be dry and properly prepared by means of shot blasting. Any dust, oil, grease, and other contaminants must be thoroughly removed.
- BPO is stirred in before use, always mix at least a minute to ensure proper homogenization.
- Whole content is poured (400–500 g/m²) on the substrate, distributed by a squeegee and rolled out to ensure a continuous film.
- Highly absorbent substrates need to be coated twice.
- Always use proper air ventilation to ensure good surface curing.

BASE COAT

Base coat based on Domacryl 9948

- Medium viscosity
- Elastic resin for wet and dry areas indoors and outdoors.
- Domacryl 9948 contains a paraffin wax which tends to float after prolonged storage. Therefore, the resin must be homogenized before use by stirring.
- Domacryl 9948 is amine pre-activated.
- Suitable for mortar, self-leveling and broadcasted floor coatings.

Preparation

Mix components **1** and **2** under high shear forces for 10 minutes. Add component **3** under mixing and disperse for 20 minutes. Add component **4** under mixing and homogenize for 5 minutes. Mix in components **5** and **6** under constant stirring and homogenize for 10 minutes.

Starting point formulation

NO.	COMPONENT	MASS %	MATERIAL TYPE	SUPPLIER
1.	DOMACRYL 9948	15	MMA resin	1
2.	GARAMITE-7305	0.3	Rheology additive	2
3.	BYK-390	0.5	Defoamer	2
4.	BYK-W 969	0.2	Wetting and dispersive additive	2
5.	DOMACRYL 9948	45	MMA resin	1
6.	DORSILIT 16.900 (0–40 µm)	39	Filler	4
Total		100		

Domacryl 9948 can also be pigmented if the application demands it. Add 4% of a pigment and disperse (time and shear forces required to disperse a pigment differ for each individually).

2–4 mm self levelling coating for medium duty flooring (1.53 kg per mm thickness)

NO.	HARDENER	WEIGHT %
1.	Starting point formulation	65%
2.	Quartz sand 0.06–0.3 mm	35%

3–5 mm self levelling coating for heavy duty flooring (1.67 kg per mm thickness)

NO.	HARDENER	WEIGHT %
1.	Starting point formulation	50%
2.	Quartz sand 0.06–0.3 mm	30%
3.	Quartz sand 0.4–0.8 mm	20%

Hardener

NO.	HARDENER	WEIGHT % (in respect to resin)	POT LIFE	CURING TIME
1.	BENZOYL PEROXIDE (BPO)	2%	15–20 min	45–50 min

Application

- Base coat is always applied to pre-primed surfaces.
- Quartz sand is stirred in for 1 minute before hardener is added.
- BPO is stirred in before use, always mix for at least a minute to ensure proper homogenization.
- Whole content is poured the substrate, distributed by a notched squeegee and rolled with a spiked roller to release any trapped air bubbles.
- Base coat is usually broadcasted with sand.
- Always use proper air ventilation to ensure good surface curing.

TOPCOAT

Ready to use topcoat based on Domacryl 9922

- Middle viscosity, hard methacrylate resin.
- Domacryl 9967 contains a paraffin wax which tends to float after prolonged storage. Therefore, the resin must be homogenized before use by stirring.
- Domacryl 9967 is amine pre-activated.
- High abrasion resistance.

Preparation

Mix components **1** and **2** under high shear forces for 10 minutes. Add component **3** under mixing and disperse for 20 minutes. Add component **4** under mixing and homogenize for 5 minutes. Mix in component **5** and disperse for 20 minutes. Add component **6** and homogenize.

NO.	COMPONENT	MASS %	MATERIAL TYPE
1.	DOMACRYL 9967	100	MMA resin
Total		100	

Starting point formulation for pigmented topcoat

NO.	COMPONENT	MASS %	MATERIAL TYPE	SUPPLIER
1.	DOMACRYL 9967	15	MMA resin	1
2.	GARAMITE-7305	0.1	Rheology additive	2
3.	BYK-390	0.4	Defoamer	2
4.	DISPERBYK-2155 TF	0.15	Wetting and dispersive additive	2
5.	TIO₂ RC 82	5	Pigment	1
6.	DOMACRYL 9967	79.35	MMA resin	3
Total		100		

Hardener

NO.	HARDENER	WEIGHT % (in respect to resin)	POT LIFE	CURING TIME
1.	BENZOYL PEROXIDE (BPO)	1.5%	15–20 min	35–45 min

Application

- Topcoat is applied on top of a base coat after it has hardened.
- BPO is stirred in before use, always mix at least a minute to ensure proper homogenization.
- To achieve good curing, topcoat is applied in a thickness of 0.4 (400 g/m²) to 0.8 mm (800 g/m²).
- The whole content is poured on the substrate, distributed by a squeegee, and back rolled to ensure a continuous film.
- Always use proper air ventilation to ensure good surface curing.

Suppliers

- **Helios Resins (www.resinshelios.com)**
- BYK
- Cinkarna d.d.
- Gebrüder Dorfner GmbH & Co
- Evonik



ISO 9001
ISO 14001
BUREAU VERITAS
Certification

