PLASTI CHEMIE International GmbH

Plastifloor® 465 (GB)

Methacrylate Resin for Durable Cold Plastic Road Markings

Description

- Low viscosity methacrylate resin used as a binder for permanent markings based on cold plastic
- Permanently elastic and is processed without plasticizers
- The viscosity of the formulated material is stable over a long period of time
- Versatile use as: flat line, profile and structure markings
- Recommended surface temperature for application is between 5°C and 45°C
- Good wetting properties for fillers and pigments
- Can be used in cold and warm climates

Application

- Junction and intersection markings, stop lines and direction arrows
- Centre markings on freeways and highways
- Manual application with trowel and draw box

Equipment

- Manual application with trowel and draw box
- Application by hand-guided machines
- Application by 2-component extrusion machines with 100:2 dosing
- Draw box application (100:2 system), even for profile and structure markings

Properties

- Suitable for high temperatures
- Permanently elastic
- Resistant to aging and weathering
- Colorfast
- Abrasion resistant
- Resistant to de-icing salts and fuels
- Low tendency to gray

Characteristics of the resin as delivered:

Property	Measurement Method	Approx. value
Viscosity at 23 °C	DIN 53 015	approx. 250 mPa · s
Flow time at 20°C, 4 mm cup	DIN 53 211	75 - 95 sec
Density D^{20}	DIN 51 757	0.97 g/cm^3
Flash point	DIN 51 755	+ 11°C
Pot life at 20°C	ca. 10 - 15 min	
Curing	ca. 30 - 35 min at 20°C	
Form of Delivery	liquid	
Shelf-life	dark at < 20 °C 6 months minimum	
Bundle	180 kg Drums 25 kg, 10 kg Pails	

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Typical formulations:

465 – 1

1,5 - 3 mm
100:2 system
flat

For hand, draw box or machine application

		pbw
Binder / Resin	Plastifloor® 465	20.00
Dispersing Additive	Tego Dispers 670	0.10
Rheology Additive	Byk 410	0.10
Rheology Additive	Bentone 27	0.10
Pigment (TiO2)	Tioxide TR 92	10.00
Fine filler (15µm)	Carbonat Calcium	20.00
Coarse filler (0.1 – 0.4mm)	Cristobalite M72	25.00
Premix beads	50 – 250 µm	25.00

Density: 1.85 kg/l
Consumption: approx 3.7 kg/m^2 for 2 mm thickness

465 – 2

up to 7 mm
100:2 system
profile

Application with suitable machines with profile function

		pbw
Binder / Resin	Plastifloor® 465	20.00
Dispersing Additive	Tego Dispers 670	0.10
Rheology Additive	Byk 410	0.20
Rheology Additive	Bentone 27	0.30
Pigment (TiO2)	Tioxide TR 92	10.00
Fine filler (15µm)	Carbonat Calcium	20.00
Coarse filler (0.1 – 0.4mm)	Cristobalite M72	25.00
Premix beads	50 – 250 µm	25.00

Density: 1.85 kg/l
Consumption: 4 - 6 kg/m^2 depending on used profile

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Methacrylate Resin for Durable Cold Plastic Road Markings

465 – 3
up to 7 mm
100:2 system
structure

Application with suitable structure machines

		pbw
Binder / Resin	Plastifloor® 465	20.00
Dispersing Additive	Tego Dispers 670	0.10
Rheology Additive	Byk 410	0.20
Rheology Additive	Bentone 27	0.30
Pigment (TiO2)	Tioxide TR 92	10.00
Fine filler (15µm)	Carbonat Calcium	25.00
Premix beads	100 - 600 µm	25.00

Density: 1.85 kg/l
Consumption: 1.5 - 3 kg/m^2 depending on used structure

Initiator/Hardener

Hardener powder 50W (50% BPO), temperature dependent.

Pot Life and Setting Time

Typical formulations 465 – 1, 465 – 2 and 465 – 3
Approved hardener: Hardener powder, as a proportion of total formulation

Temperatur [°C] (surface)	Hardener (50% DBPO) [Vol%]	Hardener (50% DBPO) [wt%]	Pot life [min]	Curing time [min]
+ 10	2.0	3.0	14	45
+ 10	1.3	2.0	18	50
+ 20	1.3	2.0	10	30
+ 20	0.6	1.0	15	35
+ 30	0.6	1.0	8	20
+ 30	0.3	0.5	12	30
+ 40	0.3	0.5	6	18

Notes:

Manual dosage of hardener powder can use mixing ratios from the table.
Automatic dosage of hardener usually uses a mixing ratio between 1.5 – 2 %.

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Storage: Methacrylate resins are subject to the handling regulations of highly flammable materials. Plastifloor® 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.
Please follow the instructions in our Safety Data Sheet.

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

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EN 13813, SR-B2, 0-AR0, 5-IR12

Plastifloor® 465

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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