

TECHNICAL INFORMATION  
COLD PLASTIC FOR PROFILED  
BICYCLE LANES (GROOVES)



# COLD PLASTIC FOR PROFILED BICYCLE LANES (GROOVES)

Art. No.: 52413020  
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**Important Information:**

Please consider our General Terms and Conditions and the general notes of the Technical Information Sheet! No liability is accepted for any errors! The information is provided to our best knowledge and experience. This information is, however, no warranty for any properties of the material. We provide this information without obligation, also regarding the rights of third parties. The user has to make sure that the material is appropriate for the respective application.

# 1 Main characteristics / Fields of application

## Cold plastic for profiled bicycle lanes (grooves)...

- belongs to the group of solvent-free, multi-component, reactive systems
- consists of two components which – through chemical interaction – form a duroplastic compound which cannot be thermally plastified thereafter
- is formulated with particular elasticity and is especially suitable for large scale coatings
- is suitable for bituminous surfaces (e.g. mastic asphalt, asphalt concrete) and also concrete pavements (primer required)
- is suitable for bicycle lane markings at intersections. For sections with heavy traffic, bicycle lane markings with higher thickness are recommended (Textured cold plastic for bicycle lanes or Cold plastic D485 for large surfaces and anti-skid coatings)
- applicable manually with scraper, trowel or special screed box

## 2 Technical Data

<b>Color</b>	Traffic red approx. RAL 3020, other colors on request
<b>Density</b>	approx. 1.86 kg/l +/- 0.1 depends on color
<b>Pot life</b>	5 – 10 min. (depends on hardener quantity, air and material temperature)
<b>Solvent content</b>	Solvent-free, do not add solvent for application
<b>Solvent for cleaning</b>	Special cleaner for marking machines Art.-No.: 3086
<b>Storage stability</b>	6 months (unmixed); protected from frost and direct sun light
<b>Trafficability / curing time</b>	Depends on climate conditions (temperature, humidity, wind) material, layer thickness and road surface. In general the marking's trafficability must be checked before it is exposed to traffic
<b>Standard packaging</b>	Cold plastic for profiled bicycle lanes (grooves): tin foil container with 10/15/25kg filling weight. Hardener: PE-bags; filling weight corresponds to mixing ratio and container content Attention: all hardener types are organic peroxides – the must be packaged separately and transported and stored away from the cold plastic in special containers (special cartons and boxes)
<b>Identification</b>	The regulations and instructions concerning appropriate transport, handling, storage, first aid and measures, toxicology and ecology are stated in our material safety data sheet! The instructions stated on the product label and in the MSDS must be followed
<b>Processing temperature</b>	min. + 5°C
<b>Surface temperature</b>	+ 5°C to + 45°C
<b>Relative humidity</b>	max. 75% (dew point spreadsheet is to be regarded)
<b>Layer thickness</b>	2 – 4 mm (depends on tools, notched trowel or screed box with profiled metal plate)
<b>Theoretical consumption</b>	approx. 3.70 – 7.50 kg/m <sup>2</sup> The actual consumption depends on applied thickness, application technique (notched trowel) and type and state of the surface.

## 3 Mixing ratio / Application techniques / Hardener

Product	Art. -No.	Technic	Hardener
<a href="#">Cold plastic for profiled bicycle lanes (grooves)</a> traffic red	52413020	Open mixing system Manual application (trowel, special screed box)	Hardener powder
<b>Mixing ratio: reactive component / base component (Cold plastic for profiled bicycle lanes)</b>		<b>: Hardener powder (BPO)</b>	<b>= 100 : 1</b>

Between October and April Cold plastic for profiled bicycle lanes (grooves) is delivered in winter formulation, due to weather conditions

## 4 Processing instructions

### 4.1 Preparation of material and application techniques

Cold plastic for profiled bicycle lanes (grooves) must be homogeneously stirred in its original container before processing. The hardener (hardener powder) is mixed with the base component at the indicated mixing ratio using an appropriate stirring device. Only use the quantity needed for the current marking job.

Cold plastic products (reactive systems) are solvent-free and must be applied without adding solvent (see 4.2.: Optimizing application properties).

The cleaning must occur before the curing of the material is complete using Special cleaner for marking machines (Art. No.: 3086).

The theoretical Consumption of the material is listed in the table "Theoretical consumption of material and drop-on material" in kg/m<sup>2</sup> on our website.

### 4.2 Optimizing application properties

Application properties and reactivity of the material depend on temperatures of cold plastic, air and surface. Proper storage conditions may partly improve application conditions (see Technical Data).

For optimizing application properties, i.e. reduction of viscosity, add 1–2 % Condenser for Cold plastic (Art. No.: 3044) can be added when temperatures of material, air and surface are low. Limit the material mixed with Condenser to the required quantity, otherwise viscosity or settle properties may change.

**Attention:** Adding too much condenser will lead to bad results, e.g. flat grooves.

## 5 Surfaces / pretreatment

### 5.1 General information

The surface must be dry, clean, free from grease, oil and loose gravel and other contaminations. The surface and potentially existing old markings must be checked for their carrying capacity and compatibility with the material to be applied. In case of doubt, test applications and adhesion tests are required. Ideally old markings should be removed with appropriate mechanical procedures.

### 5.2 Concrete and cement-bound surfaces

The pavement components that prevent good bonding, especially on new concrete, e.g. fine mortar layer, concrete slurries, concrete after-treatments as setting retarders, paraffin, impregnations on silicate basis etc., must be appropriately removed (e.g. with high pressure waterjet, fine millcut or similar). We recommend conducting test applications. In case of doubt communicate your concerns in written form.

Before applying Cold plastic for profiled bicycle lanes (grooves), concrete or cement-bound surfaces should be pretreated with primers:

- a) using spray technique (paint spray machine) with 2-component EP Primer (Art. No.: 8609000) or
- b) manually (roller) with 2-component primer B71 for concrete (Art. No.: 8010)

It is essential to have a sufficient and uniform coverage with primer in order to obtain an optimum bonding of cold plastic and concrete. Primer consumption may vary depending on

the concrete's porosity. The humidity of concrete must not exceed 4% when applying 2-component B71 for concrete primer. Primers based on epoxy resins are suitable for residual damp surfaces. Primers diminish bubble formation which is likely to occur when concrete surfaces are not primed.

### **5.3 Bituminous surfaces**

Any loose components such as chippings must be removed. Special agents used in new pavement asphalt (e.g. flux oils, adherents) are detrimental to good bonding of markings and may cause discoloration. Since these components are hardly removable mechanically, the surface should be exposed to traffic for 4 – 6 weeks. Before application takes place bonding checks are recommended.

### **5.4 Cobbled pavement**

Natural, artificial and compound stone pavements are non-static surfaces. In general, they are not suitable for bicycle lane markings with thick layers. No guarantee is given in case of crack formation, chippings caused by the movement of pavement parts, poor marking bonding (e.g. natural or artificial stones), penetration of moisture, wear of the marking. Therefore cobbled pavements are not suitable for Cold plastic for profiled bicycle lanes (grooves). Cobbled pavements require a costly pretreatment (see: General Information on Technical Information sheets).

### **5.5 Floor coatings**

For markings on floor coatings our indoor marking products should be used.

## **6 Application techniques**

Manually with scraper, notched trowel or special screed box. Cold plastic for profiled bicycle lanes (grooves) is mixed homogeneously with hardener powder. Then the mixed cold plastic is applied by using a squeegee (height-adjustable) and then a notched trowel or special screed box. Attention: Due to limited pot life cold plastic should be applied without any delay to get an optimal roughness and structure.