

Product Description **PlastiRoute® CSP** is a sprayable, solvent-free 2 or 3 component cold spray plastic for road markings. It is recommended for permanent markings on asphalt and concrete where high traffic loads occur.

By using our verified drop on-beads and **InjectLine®**-particles, **PlastiRoute® CSP** will yield type I or type II markings, as accredited by many certificates, see below.

PlastiRoute® CSP is offered in a 2 component version (98:2) as well as 3 component (49:49:2 also known as 1:1 or 50 : 50) version. Standard colours are White and Traffic Yellow, whereas further colours are available on request.

PlastiRoute® CSP-2C White
PlastiRoute® CSP-3CA White Component A
PlastiRoute® CSP-3CB White Component B

PlastiRoute® CSP-2C Traffic Yellow 1023
PlastiRoute® CSP-3CA 1023 Traffic Yellow Component A
PlastiRoute® CSP-3CB 1023 Traffic Yellow Component B

Application

Surface Preparation

Before applying, the surface should be dry, clean and free of dust, salt and grease or oil. The surface must be adhesive; old coatings must be checked. Depending on the amount of flux oils contained in new bituminous surfaces, these may need to be weathered up to 8 weeks before final application. If cold plastic material is applied too early on fresh asphalts the cured marking can be peeled off with a soft black asphalt layer beneath. In case of doubt we recommend applying a test stripe and try to peel it off. To reduce this effect hot ambient temperatures should be avoided.

Concrete surfaces have to be prepared with
PlastiRoute® THAN Primer (consumption ≈ 0.1 kg/m²)

Application Equipment

The paint is designed for application with airless road marking equipment.

Application Requirements

Air temperature 5 – 35 °C
Surface temperature 5 – 40 °C
 Please request a special summer version if these temperatures are exceeded)
Max. relative humidity 85 % H_{rel}
Film thickness 300 – 600 µm

Initiator / Mixing Ratio

liquid peroxide 1.5 – 2.0 % wt
 powder peroxide 1.2 – 1.6 % wt

Pot-Life: CSP-2C

2 parts liquid peroxide + 98 parts CSP – 98 : 2
 → Pot-life at 22 °C ~ 3 minutes – higher temperature reduces pot-life.

Pot-Life: CSP-3C

2 parts liquid peroxide + 49 parts CSP-3CA Component A → initiated Component A
 → Pot-life at 22 °C ~ 48 h – higher temperature reduces pot-life.

51 parts initiated Component A + 49 parts CSP-3CB Component B
 → Pot-life at 22 °C ~ 3 minutes – higher temperature reduces pot-life.

Note: The chemical reaction starts irreversible as soon as the peroxide gets in contact with
 CSP-2C or CSP-3CB Component B!

Liquefier

The cold spray plastic is ready for processing when delivered. Only for very special spray setups a reactive liquefier may be needed to optimize the spray pattern. For this purpose only use our acrylate-based thinner which will constitute a beneficial part of the final cold plastic when cured:

PlastiRoute® Reactive Liquefier

Application

Application Process:
CSP-2C

The material must be stirred until homogeneous. CSP-2C is mixed directly with ≈1.7 % wt liquid peroxide initiator. When mixed with peroxide initiator the curing process starts immediately! → Pot-life at room temperature ~ 3 minutes – higher temperature reduces the pot-life.

Whenever the application is stopped, application equipment has to be cleaned from the reactive cold spray plastic mixture immediately!

Application Process:
CSP-3C

The material must be stirred until homogeneous. CSP-3C Component A is mixed with ≈2.8 % wt powder respectively ≈3.4 % wt liquid peroxide initiator, first. The storage time of this initiated component A is limited! → Pot-life at room temperature ~ 48 hrs. – higher temperature reduces pot life.

When initiated Component A is combined with the accelerated Component B the curing process starts immediately! → The pot-life for this mixture at room temperature is about 3 minutes – higher temperature reduces pot-life.

Whenever the application is stopped, application equipment has to be cleaned from the reactive cold spray plastic mixture immediately!

Application – General –

Free from toxic heavy metals or their compositions. Free from aromatic hydrocarbons. Additional information regarding current legal regulations and information regarding workers health and safety are listed in the Material Safety Data Sheet. Also instructions about transport, handling and storage, disposal and advices regarding first aid, toxicology and ecology are given. The Material Safety Data Sheet has to be read and understood before commencing work. The material may not be used for any purpose other than the intended purpose without the consent of the manufacturer. Please contact GEVEKO PLASTIROUTE GmbH, Müllheim, for applying on special surfaces or for custom application techniques (contact-address on last page).

Consumption

White	1023 Traffic Yellow
300 µm = 0.3 l/m ² ≈ 0.48 kg/m ²	300 µm = 0.3 l/m ² ≈ 0.45 kg/m ²
400 µm = 0.4 l/m ² ≈ 0.64 kg/m ²	400 µm = 0.4 l/m ² ≈ 0.60 kg/m ²
600 µm = 0.6 l/m ² ≈ 0.96 kg/m ²	600 µm = 0.6 l/m ² ≈ 0.89 kg/m ²

Consumption-table for 1000 meter full line of film thickness 400 µm:

Width	Quantity White	1023 Traffic Yellow
8 cm	32 l = 51.2 kg	32 l = 47.7 kg
10 cm	40 l = 64.0 kg	40 l = 59.6 kg
12 cm	48 l = 76.8 kg	48 l = 71.5 kg
15 cm	60 l = 96.0 kg	60 l = 90.9 kg

Pass Over Time

Independent of film thickness: < 12 min at 22 °C

Cleaning Of Equipment

Use **PlastiRoute® Cleaner**

item no. 58819991

Technical characteristics

<i>Binding Agent</i>	Pure acrylic polymer resin, dissolved in acrylic monomers	
<i>Dry Residue</i>	≥ 99 %	
<i>Colour</i>	White	1023 Traffic Yellow
<i>Density</i>	1.60 ± 0.05 kg/l	1.49 ± 0.05 kg/l
<i>Viscosity</i>	35 – 50 s (according to DIN EN ISO 2431, cup Ø 6 mm)	
<i>Additional Information</i>	See MSDS	
Storage	<p>12 months unbroken, under proper storage conditions: Store in tightly closed original containers in a dry, well-ventilated room at temperatures between +5 °C and +30 °C, not directly on the floor and not in the vicinity of heating radiators.</p> <p>Please note that the material can show a tendency towards sedimentation during transport and storage. After having been stirred-up homogeneously, the material will be ready for use again.</p>	
Packaging	Metal bucket with 38.8 kg and steel container with 1,350 kg net wt.	

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