

Product Description	2-component solvent borne epoxy-paint with low content of organic solvents. HSRoute® POX-Outdoor must be mixed homogeneously with HSRoute® POX Hardener in a ratio of 28:1 . (1 box HSRoute® POX Hardener - 0,85 kg - needed for one bucket HSRoute® POX Outdoor - 24 kg) Suitable for pneumatic and airless spray application of marking systems type I and type II.
Area of application	Suitable for the application of centre and edge lines on bituminous surfaces on country roads, national roads, state roads and highways. Not recommended for city-marking.
Technical characteristics	
Binding agent:	Pure acrylic polymer with Bisphenol A – epoxy resin
Colours:	Various colours available, more colour-tones on request
	RAL-Code Color tone
	White
	1023 Traffic Yellow
	2009 Traffic Orange
	3020 Traffic Red
	4006 Traffic Purple
	5017 Traffic Blue
	6018 Yellow Green
	6024 Traffic Green
	7042 Traffic Grey A
	7043 Traffic Grey B
	9017 Traffic Black
Pigmentation:	Weather-proof organic and inorganic pigments
Volume dry:	~ 54.0 %
Density:	1.55 ± 0.05 kg/l
Viscosity:	30 – 45 seconds (according to DIN EN ISO 2431, cup Ø 6 mm)
VOC-content:	24.4 % (371 g/l) (according to VOC-guideline RL 1999/13/EG)
Additional information:	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.
Application properties	
Viscosity:	Under normal circumstances the material can be used directly as delivered. To optimize the spray, the viscosity can be decreased by adding max. 3 % by weight of HSRoute® Thinner .
Application process:	The material must be stirred until homogeneous. HSRoute® POX Hardener (metal can 0.85 Kg net) is slowly added under stirring, resulting a mixing ratio of 28 to 1. The mixture is stirred 1 minute. Afterwards the mixture can be processed like a conventional solvent borne paint within its pot life of 48 hours. Warning: no visible end of pot life! After mixing in the hardener, material has to be consumed within 48 h, otherwise film formation will fail. The application is made with conventional pneumatic or airless application machines. For airless application the use of nozzles wider than 0.021 inches is recommended. The spray angle shall be less than or equal to 40°. The machine shall be equipped with a sieve 60 mesh (Not 100 mesh!). The material may not be used for any purpose other than the intended purpose without the consent of the manufacturer. When used in a different way or when applied on special surfaces, please contact the manufacturer before.
Air temperature:	> + 10 °C (> 50 °F)
Surface temperature:	+ 10 °C to + 50 °C (50 °F to 122 °F)
Max. relative humidity:	85 % H _{rel}
Pass-over time:	The lines can be passed-over after < 20 - 30 min. The chemically hardening process is fully completed after 2 days. If the ambient temperature falls down below +6 °C (43 °F) then the chemically hardening process will stop. It starts again when the ambient temperature is rising to > + 6°C (> 43 °F). (Relative air humidity 60 % and air temperature 20 °C (68 °F). Higher temperatures may reduce the pass-over time.)

Surface preparation: Before application, the surface shall be dry, clean, free of dust and loose particles, salt and grease or oil. Surface must be adhesive. Old markings must be checked before over marking.

Asphalt
 New bituminous surfaces should be weathered 4 - 8 weeks before final application. Aged asphalt or any asphalt poor in bitumen has to be prepared with **PlastiRoute® THAN Primer** (≈ 0.2 kg/m²). It's not recommended to apply this product on asphalt showing large stones (bigger than 2 cm).

Concrete
 Fresh concrete surfaces containing a paraffin layer must be mechanically pre-treated by grinding or shot blasting. Any cement residue has to be removed before application. All concrete surfaces have to be prepared with **PlastiRoute® THAN Primer** (0.2 kg/m²). Also check technical datasheet of **PlastiRoute® THAN Primer**.

Polished surfaces
 When coating on smooth surfaces (polished stone, granite, basalt, tile, glazed tiles, etc.) and surface-treated concrete may cause reduced adhesion. In these substrates, we recommend to apply test markings check for proper adhesion after 14 days.
The manufacturer will not be liable for failures of adhesion on any polished surface.

Use of thinner: At low temperatures the paint becomes thick-flowing. To optimize the spray-viscosity, the paint may be thinned with max. 3 % by weight with **HSRoute® Thinner**.

Do not use any other organic solvents for thinning, because they can cause a flocculation the binding agent!
HSRoute® Thinner can also be used as cleaning agent for tools and application equipment.

Thickness, wet: 300 µm 400 µm 600 µm
Consumption: approx. 0.46 kg/m² up to 0.92 kg/m²

Quantity for a line with a length of 1.0 km (average density of the mixture 28:1 = 1.52 kg/l)

Thickness, wet	Width of the line	Consumption	Width of the line	Consumption
0.3 mm	10.0 cm	45.6 kg/km	25.0 cm	114.0 kg/km
0.4 mm		60.8 kg/km		152.0 kg/km
0.6 mm		91.2 kg/km		228.0 kg/km
0.3 mm	12.0 cm	54.8 kg/km	30.0 cm	136.8 kg/km
0.4 mm		73.0 kg/km		182.4 kg/km
0.6 mm		109.5 kg/km		273.6 kg/km
0.3 mm	15.0 cm	68.4 kg/km	50.0 cm	228.0 kg/km
0.4 mm		91.2 kg/km		304.0 kg/km
0.6 mm		136.8 kg/km		456.0 kg/km

Storage stability: 1 year after delivery, when kept in the original packaging under proper storage conditions. Please notice 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.

Storage: Store in tightly closed original containers in a dry, well-ventilated room at temperatures between +5 °C and +30 °C (41 °F – 86 °F), not directly on the floor and not in the vicinity of heating radiators.

Packaging:

HSRoute® POX Outdoor	HSRoute® POX Hardener
Metal bucket with 24.0 kg net.	Metal can with 0.85 kg net.
Plastic container with 900.0 kg net.	Metal can with 16.0 kg net.