

TECHNICAL DESCRIPTION

INDUSTRIAL PRODUCT

No. 230

MAY 2010

DEKO Professional **ACRYLATE PAINT FOR HORIZONTAL ROAD MARKING** *CITY PLUS*

SHORT DESCRIPTION

Description:	Acrylate paint for asphalt and concrete pavements
Use:	<ul style="list-style-type: none">• Marking of roads and highways, airplane runways, car parks, playgrounds and sports grounds with asphalt and concrete pavements. Meets the special requirements for road construction;• Marking of the most intensive sections of urban and republican road network. It is fastest in reaching the maximum working properties.
Properties:	<ul style="list-style-type: none">• Meets the requirements of BNS EN 1871:2004 and BNS EN 1436:2008• Fast-drying;• Excellent working properties, ensuring very good conditions for traffic safety;• High wear resistance;• Good elasticity;• High cohesion coefficient;• Resistance to gasoline and water.
Drying temperature:	At normal air temperature. Work in dry weather at a temperature from 5°C to 35°C.
Certificates and technical specification:	TS-ORG-0010 Certificate of conformity No. 14 RERECBM – 745 / 16.12.2009 for One-component acrylate paint for horizontal road marking Deko Professional white and yellow with BNS EN 1871:2004 and BNS EN 1436:2008. Evaluator: "Bulgarcontrola" JSC.

PHYSICAL CHARACTERISTICS

Colour:	Produced in white and yellow colours.
Appearance:	Homogenous, easy-flowing mass.
Flowing time, funnel 6 mm, (23±0,5)°C: (BNS EN ISO 2431)	min 90
Non-volatile content: (BNS EN ISO 3251):	min 75,5%
Theoretical consumption:	450-550 g/m ² at thickness of the dry film about 250 µm.
Ignition temperature:	- 2°C
Density (BNS EN ISO 2811-1):	1,60 ±0,06 g/cm ³
Maximum content of VOC for this product (cat.: A/i) is 500 g/l	

CHARACTERISTICS OF THE COATING

Surface drying:	10 min
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Complete drying time, (23±2)°C, at thickness of the dry film 45 – 60 µm: (BNS EN 29117)	20 min
Drying time after application:	At application thickness of the dry coating of 220 - 280 µm, depending on the environmental temperature it dries in 45 – 50 min.
Rub resistance of the film with sand at thickness of the dry film 60 µm: (BNS 14120-77)	0,91 kg/µm (at min 0,08 kg/µm in accordance with BNS 14120-77)
Test of lattice threads: (BNS EN ISO 2409):	2 degree
Sliding resistance: (EN 1436)	55, class S 3, SRT units
Resistance to the effect of liquids at (23±2)°C; (BNS ISO 2812-1)	<ul style="list-style-type: none"> distilled water: min 72 hours
Luminance Factor (β): (EN 1871)	β = 0,868 % class LF7 – for white β = 0,745 % class LF2 – for yellow
Working method:	Open the packaging carefully and homogenize well. Work at temperatures over 5°C for air and maximum 35°C for the pavement. In hot summer days (air temperatures over 25°C, respectively over 35°C of the asphalt surface), application must be done in the morning (6-10 h), late in the afternoon (18-22 h) or during the night, especially for relatively new asphalt pavements.
Thinning:	With Deko Professional Bat Thinner summer / winter (spring, autumn) , depending on the season: 1. On new and relatively new asphalt pavements it is applied mainly by machines for airless spraying, without thinner or with minimum thinning up to 4%. (Greater thinning is not necessary because the new asphalt surface has a sufficiently thick layer of bitumen, which would be dissolved in the highly thinned paint and as a result the marking would turn yellow or black). The time for releasing the road traffic is at least 2 hours after applying the marking in a specific section. 2. On old asphalt and concrete pavements it is applied in two ways : 2.1. With machines for airless and air spraying, obligatory thinning of the paint up to 6-8%. (This is necessary for better wetting of the old asphalt or concrete pavement with the thinned paint and therefore to improve the cohesion between them). After preliminary priming with Specialised primer for HRM (after complete drying – 15–20 minutes) with machines for airless spraying, without thinner or with minimum thinning to 4% BAT Thinner. The thickness of the dry film must be 250-300 microns, which is achieved with 400-500 microns wet film (because of the obligatory 6-8% thinning). The time for releasing the road traffic is at least 2 hours after applying the marking in a specific section.
Application method:	Road marking equipment, brush, roller
Suitable bases:	Asphalt and concrete surfaces
Preparation of the base:	<ul style="list-style-type: none"> Cleaning from mud and dust;



	<ul style="list-style-type: none"> • Removal of oily stains with Deko Professional BAT Thinner / AMV Thinner; • Drying of the painted surfaces; • If necessary – priming of the concrete surfaces and worn out asphalt surfaces with Specialised primer for horizontal road marking.
Coating thickness:	The thickness of the dry film must be 250-300 microns, which is achieved with 350-450 microns wet film. The consumption is 450-550 g/m ² (without thinner). In this thickness of the dry film a light-reflective layer of beads may be applied.
Safety measures:	Deko Professional Paint for horizontal road marking CITY PLUS is classified as a harmful and flammable product. When used, the requirements for fire safety and production hygiene must be observed. If necessary – refer to the Safety Data Sheet.
Packaging:	Metal packages with net weight 25 and 30 kg.
Storage:	Storage temperature – up to 30°C. Store in original, tightly sealed packages in sheltered and dry storage premises, protected from direct sunlight and heating appliances! Keep out of the reach of children!
Shelf life:	12 months from production date in factory-sealed package.

RECOMMENDED APPLICATION SYSTEMS:

BASE	SYSTEM	COATS	Total thickness of the dry film	Time for application of next coat
Asphalt and concrete	<u>I system</u> Deko Professional Paint for horizontal road marking CITY PLUS, thinned according to instructions with Deko Professional BAT Thinner summer / winter	I coat	220-280 microns	---
	<u>II system</u> Specialised primer for HRM Deko Professional Paint for horizontal road marking CITY PLUS, thinned according to instructions with Deko Professional BAT Thinner summer / winter	I coat	0-10 microns	---
		II coat	200-300 microns	After drying of the previous coat

