

TECHNICAL DESCRIPTION

INDUSTRIAL PRODUCT

No. 229

MAY 2010

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

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 city street network. With improved drying. Suitable for the requirements of intensive traffic.
Properties:	<ul style="list-style-type: none">• Meets the requirements of BNS EN 1871:2004 and BNS EN 1436:2008• 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 76,5%
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):	1,61 ±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:	15 min
Complete drying time, (23±2)°C, at thickness of the dry film 45 – 60 µm:	25 min

(BNS EN 29117)	
Drying time after application:	At application thickness of the dry coating of 220 - 280 μm , depending on the environmental temperature it dries in 75 – 80 min.
Rub resistance of the film with sand at thickness of the dry film 60 μm: (BNS 14120-77)	0,82 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)	50, class S 2, SRT units
Resistance to the effect of liquids at (23\pm2)$^{\circ}\text{C}$; (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:	<p>Open the packaging carefully and homogenize well. Work at temperatures over 5$^{\circ}\text{C}$ for air and maximum 35$^{\circ}\text{C}$ for the pavement.</p> <p>In hot summer days (air temperatures over 25$^{\circ}\text{C}$, respectively over 35$^{\circ}\text{C}$ 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.</p>
Thinning:	<p>With Deko Professional Bat Thinner summer / winter (spring, autumn), depending on the season:</p> <p>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.</p> <p>2. On old asphalt and concrete pavements it is applied in two ways:</p> <p>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).</p> <p>2.2. 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.</p>
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; 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 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, 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, 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

