



LineSTIL® PROFILED (COLD / 2K / MMA BASED)

Product Description

LineSTIL® Profiled Road Marking Paint is a two-component, reactive methyl methacrylate based (MMA) road marking paint applied by adding active benzoyl peroxide (BPO) chemical to road marking paint. Specially formulated that can be applied with the profile type method. LineSTIL® Profiled Two Component Paint is very high physical and chemical resistance, which hardens with the reaction formed as a result of mixing the components in 98:2 ratio and adheres to the surface on which it is applied. The sequential and regular thicknesses is formed by the profile type method. The raised profile lines marking generate a noise and hard vibration when a vehicle tyre rolls over it. The frequency of the sound warns the driver in order to return the lane where the driver should be when the tyre comes in contact in this way. LineSTIL® Profiled Road Marking Paint is suitable for using at road junctions, speed breaker lines, and especially at main arterial crossings. Although the initial cost of LineSTIL® Profiled Type Road Marking Paint, which does not contain volatile organic components, is higher than the traditional solvent-based road marking paints (acrylic road marking paint, alkyd road marking paint and chlorine rubber road marking paint) and thermoplastic road marking paint, which requires heat application, its UV resistance, physical and chemical resistance are extremely high. . In addition to having a longer service life, it is an excellent road marking paint with reflective power.

LINESTIL® PROFILED ROAD MARKING PAINT



LineSTIL® Profiled Road Marking Paint is formulated to meet the requirements of the Technical Specifications of the General Directorate of Highways of the Republic of Türkiye, TS EN 1871 and TS EN 1436 standards.

Characteristics

*Excellent adhesion.*High mechanical and chemical resistance.*Resistant to harsh weather conditions and abrasion. *High UV resistance *Provides fast drying, better durability, better color retention and gloss. *High covering and reflecting power. *Thanks to its high strength, it preserves its reflective power, color and film thickness for a long time under heavy traffic. *Hydrophobic surface with self-cleaning feature. *Extremely weather resistant and has a longer service life *Excellent wear resistance and low dirt retention *High reflectivity/gloss factor when glass beads are added *Excellent adhesion to asphalt (some concrete surfaces need to be primed) *Excellent slip resistance on asphalt and bituminous surfaces *Excellent glass bead retention properties, Day and night visibility *The road can be opened to traffic in 30- 45 minutes after the application.

Application Surfaces

It is suitable for asphalt and bituminous surfaces. When used on concrete road surfaces, LineSTIL® Acrylic impregnated primer is required to be applied to the concrete surface prior to application by milling, sandblasting or to close the porous capillaries on the concrete surface and increase adhesion.

Application Equipment

It is recommended to apply with professional hand application teams and special marking machine. Rumble strips (named also "sleeper lines" or "alert strips") alert inattentive drivers of potential danger, by causing a tactile vibration and audible rumbling transmitted through the tires into the vehicle interior.



Handpushing



Hand-held

Surface Preparation Information

LineSTIL® Profiled Road Marking Paint performance varies depending on the preparation level of the surface to be applied. The application surface must be clean, dry, dust-free, free of oil and other surface residues and loose materials by means of compressed air, broom, vacuum cleaner, water jet. The surface to be applied should not be wet in any way. All auxiliary equipment for surface cleaning should be available before application. LineSTIL® Profiled Type Road Marking Paint is recommended for maximum performance in the renewal of paints with the same properties (old paint coating residue should be less than 25%) or in newly applied asphalt and bitumen mixtures. It should never be applied on water-based, solvent-based or thermoplastic paints. Other surface conditions, such as areas with heavy engine oil contamination or existing epoxy coatings, require a flushing procedure or abrading the surface prior to application of paint. The temperature of the paint should be 5 °C higher than the road surface to be applied



Weather Condition

Air temperature, surface temperature, humidity and weather conditions following the application are very important for a correct application. Always check the weather forecast. Do not start the application if heavy rain is expected within 2 hours. Drying time may be extended at high relative humidity and low temperatures. Application air temperature should be between 5 °C and 40 °C. Depending on the air temperature, the active benzoyl peroxide (BPO) component of the percentage given in the table is mixed with the paint. The main parameters that will affect the drying time are low temperature and ground temperatures, high relative humidity, dew and rain. The application area can be opened to traffic by taking into account the drying times according to the air temperatures and relative humidity 50% in TABLE 1 below.

Amount of Hardener to be used according to Changing Air Temperatures, Curing and Hardening Time			
Temperature	Hardener % pbw	Curing time (temperature of material) approx. Min.	Hardening Time (of Substrate) approx. min.
0 °C	2	14-18	50
5 °C	2	12-15	40
10 °C	1,5	12-15	35
15 °C	1,5	10-12	30
20 °C	1	10-12	30
25 °C	0,5	10-12	25
30 °C	0,4	9-11	25
35 °C	0,3	8-10	20

Table 1

Paint Selection and Safety

It is important to use only recommended or specified paint for each application. Paints based on methyl-methacrylates emit high amounts of heat during the reaction. Due to the exothermic reaction, it is not recommended to mix more than 1 tin (25kg - 33kg) of product at a time with benzoyl peroxide (BPO) before application. Avoid keeping and storing indoors and outdoors for long periods as much as possible. To avoid spills, risk of fire and evaporation of volatile organic compounds, ensure that the lids are tightly closed when transporting containers or storing products. Keep paints away from heat and flame. Please use suitable protective equipment, gloves and mask. Consult MSDS and/or product labels for further safety procedures.



Excellent Adhesion



Excellent Durability



High UV Resistance



High Abrasion Resistance



High Weather Resistance

Paint Preparation

It is a two-component, Profiled paint applied by mixing active benzoyl peroxide (BPO) hardener to reactive LineSTIL® Profiled Road Marking Paint in a ratio of 98:2. Drying of the paint is initiated by adding a catalyst, also called a hardener, creating a fast-drying chemical reaction (polymerization). 50% benzoyl peroxide (BPO) hardener is particularly suitable for this task. . In order to provide high performance of Profiled Paint prepared, it should be applied by mixing thoroughly to be homogenous with an electric drill minimum 1 minute after the addition of benzoyl peroxide (BPO). The amount of hardener to be used according to the changing of air temperatures is added into the paint in the amounts specified in TABLE 1. Once the hardener has been added, the polymerization (hardening) process cannot be stopped. It is recommended to apply by a professional team.

Glass Beads Usage Amounts

Note: The values given in the table are theoretical. Consumption amounts may vary depending on the surface to which the paint will be applied and ambient conditions.

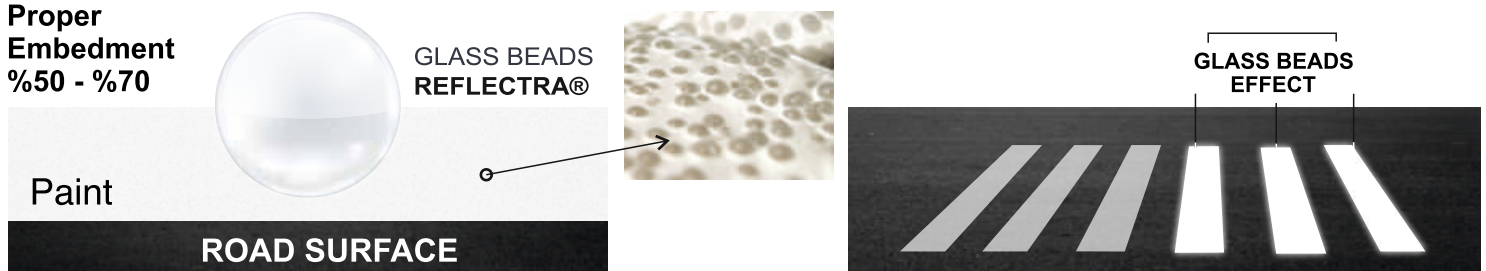
Glass Beads (TS EN 1423)	Need	Consumption
		265 g/m ²

Day & Night Visibility

Night Visibility: Thanks to the glass beads', in different sizes on the road marking paints, retro-reflective action at night a vehicle's headlight beam is returned to the driver's eyes which results in a "light-up effect" of the stripe and creates a Night visibility. This is a decisive plus for road safety. Visibility in road marking paint of the glass beads increase according to the embedding degree / size, amount and quality.

Daylight Visibility: The contrast between the coating and the pigmentation of the marking material allows the stripes to be seen clearly in daylight conditions.

Proper Embedment %50 - %70



Physical Properties	COLOR	WHITE	YELLOW
	VISCOSITY (DANIEL)	12 ± 1	12 ± 1
	DENSITY	2,0 g/ml ± 0,05	2,0 g/ml ± 0,05
	LUMINANCE CLASS / FACTOR	LF6 / β ≥ 0,80	LF2 / β ≥ 0,50

Classes of difference in Gloss Factor after UV Ageing

COLOR	CLASS	Δβ
WHITE, YELLOW	UV-1	≤0,05

The Difference Classes in Luminosity Factor After Bleeding Resistance Test

COLOR	CLASS	Δβ
WHITE, YELLOW	BR-1	≤0,03

Application Areas



Highways



Tunnels



Rumble Strips



Lane Offset



Industrial Areas

Waste Procedure

All regulations regarding the transportation, storage and disposal of all hazardous materials and wastes should be followed carefully. Paint pail and related materials should be insulated in accordance with the required waste regulations. Otherwise, it may result in penalties specified in the legal regulations. Please follow all regulations and minimize the excessive usage as possible.

Storage

Store between 5 °C and 30 °C in closed areas keeping away from direct sunlight. The storage area should be adequately ventilated to prevent moisture build-up. The storage area should be adequately ventilated to prevent moisture build-up. The lid should be tightly closed when the paint pail is not used. The shelf life of LineSTIL® Profiled Road Marking Paint is minimum 1 year in its original packaging and under suitable storage conditions.

Important Information

The information given in this data sheet is not intended to be comprehensive and may not be used for any purpose other than that specifically recommended on this sheet without our written approval as to the suitability of the product for its intended use. Otherwise, it is entirely user's own responsibility. As conditions of use, application method and surface suitability during painting are out of our control. The recommendations contained herein do not make any guarantees. The recommendations contained herein do not give any guarantee. Therefore, we accept no responsibility whatsoever for any loss or damage caused by the performance or the use of this product. The information on this data sheet is obliged to make changes from time to time in the light of experience and ongoing product development programs. It is the user's responsibility to ensure that this page is up-to-date before using the product.

Note: These data have been tested under lab conditions in the R&D department of Stil Trafik İşaretleri San. Ve Tic. A.Ş. Our company cannot be held responsible for any direct, indirect, special and consequential losses and damages that may arise from relying on this information and its use.

Packaging

LineSTIL® Profiled Road Marking Paint is produced in 25 kg metal cans as standard.



Merkez / Head Office: Kaptan Paşa Mah. Halit Ziya Türkan Sok.
No: 19 / 13 Famas Plaza C Blok Kat: 7 34384 Şişli - İstanbul

Fabrika / Factory: Köşeler Köyü Mah. Kuyubaşı Sk.
No:2/3 TR- 41455 Dilovası - Kocaeli / TÜRKİYE

+90 212 491 01 44

+90 212 293 85 15

info@stiltrafik.com

www.stiltrafik.com