

TECHNICAL INFORMATION  
1-C FLUOX daylight  
luminescent paint system



# 1-C FLUOX daylight luminescent paint system

Art.-No.: 8109016 white,                   1-C FLUOX Primer  
 Art.-No.: 810....., colored           1- C FLUOX luminescent paint  
 Art.-No.: 8100000 transparent,       1- C FLUOX UV-clear varnish

Version: 2023-07-05

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## Important Information:

Please consider our General Terms and Conditions and the general notes of the Technical Information Sheet! No liability is accepted for any errors! The information is provided to our best knowledge and experience. This information is, however, no warranty for any properties of the material. We provide this information without obligation, also regarding the rights of third parties. The user has to make sure that the material is appropriate for the respective application.

# 1 Main characteristics / Fields of application

## 1-C FLUOX daylight luminescent paint system...

- is a 3-layer marking system, consisting of:

- 1-C primer
- 1- C daylight luminescent paint
- 1- C UV clear varnish

and belongs to the group of solvent-based 1-component paints

- the system needs all three layers to get sufficient daylight luminescent properties in different colors
- absorbs energy out of light through special pigments and realizes a daylight luminescence effect
- is used for fluorescent coatings
- used for buildings, emergency exits, leisure facilities, and on floors with little stress
- normally applicable on walls and for indoor bituminous and concrete surfaces with little traffic impact
- suitable for airless and airspray application techniques

## 2 Technical Data

3-layer system	1st layer	2nd layer	3rd layer
<b>Product</b>	<b>Primer for 1-comp. FLOUX daylight luminescent paint system</b>	<b>1-comp. daylight paint</b>	<b>UV clear varnish for 1-comp. FLOUX daylight luminescent paint system</b>
<b>Art.-No.</b>	8109016 / white	8101026 / luminous yellow 8102005 / luminous orange 8103024 / luminous red 8105400 / luminous blue 8106038 / luminous green	8100000 / transparent
<b>Density</b>	1.57 kg/l +/- 0.1	1.01 kg/l +/- 0.1	0.96 kg/l +/- 0.03
<b>Thinner: on request</b>	Thinner for HS paints (Art.-No.: 3080)	Thinner for HS paints (Art.-No.: 3080)	Thinner for HS paints (Art.-No.: 3080)
<b>Thinner for cleaning</b>	Special cleaner for marking machines (Art.-No.: 3086)	Special cleaner for marking machines (Art.-No.: 3086)	Special cleaner for marking machines (Art.-No.: 3086)
<b>Overcoating possible after</b>	approx. 5-15 min. (when no longer tacky and completely dry)	approx. 10-25 min. (when no longer tacky and completely dry)	approx. 10-15 min.
<b>Drying time / Trafficability</b>	/	/	approx. 2 hours. after last application (must not be tacky)*
<b>Wet film thickness to be applied</b>	<b>approx. 200 µm - 400 µm</b> (ensure uniform and sufficient coverage)	<b>min. 100 µm - max. 600 µm</b> if necessary up to 600µm to get enhanced luminous properties. Layer more than 300µm thickness: spray in two layers	<b>min. 60 µm - max. 100 µm</b> apply two thin sprayed layers
<b>Theoretical consumption</b>	approx. 0.314 kg/m <sup>2</sup> (0.20 l/m <sup>2</sup> ) approx. 0.628 kg/m <sup>2</sup> (0.40 l/m <sup>2</sup> )	approx. 0.1 kg/m <sup>2</sup> (0.102 l/m <sup>2</sup> ) up to approx. 0.6 kg/m <sup>2</sup> (0.6 l/m <sup>2</sup> )	approx. 0.06 kg/m <sup>2</sup> (0.062 l/m <sup>2</sup> ) up to approx. 0.096 kg/m <sup>2</sup> (0.103 l/m <sup>2</sup> )
<b>Standard packaging</b>	2.5 l - Tin container 5.0 l - Tin container 10.0 l - Tin container	2.5 l - Tin container 10.0 l - Tin container	2.5 l - Tin container 5.0 l - Tin container 10.0 l - Tin container
	Other containers / filling weights on request		
<b>Identification</b>	The regulations and instructions concerning appropriate transport, handling, storage, first aid and measures, toxicology and ecology are stated in detail in our material safety sheets! The instructions stated on the product label and in the MSDS must be followed.		

[www.swarco.com/rms](http://www.swarco.com/rms)

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<b>Storage stability</b>	1 year, in sealed original packaging; protect from frost and direct sun light
<b>Processing temperature</b>	min. + 5°C
<b>Surface temperature</b>	+5°C up to +45°C
<b>Relative humidity</b>	max. 75% (dew point spreadsheet has to be regarded)

\* In general the markings' stability must be checked before exposing it to traffic impact

## 3 Processing instructions

### 3.1 Preparation of material and application techniques

All three products of the 1-C FLUOX daylight luminescent paint system must be homogeneously stirred in their original containers before processing. The exact machine adjustments have to be done according to the manufacturer's instructions. Layer thickness has to be evenly distributed to get consistent daylight properties.

The theoretical material consumption can be found in the table "Theoretical material- and drop-on consumption" on our website.

The cleaning must occur before the complete drying is completed by using Thinner for HS-paints (Art.-No.: 3080) or special cleaner for marking machines (Art.-No.: 3086).

### 3.2 Optimizing of application properties

Products are ready for use as delivered and usually need no thinning. It is possible to optimize the material's spray properties by adding max. 2% Thinner for HS-paints (Art.-No.: 3080). Use thinner recommended by manufacturer only.

## 4 Surfaces / pretreatment

### 4.1 General information

The surface must be dry, clean and free from grease, oil and loose gravel and other contaminations. The surface and potentially existing old markings must be checked for their carrying capacity and compatibility with the material to be applied. In case of doubt, test applications and adhesion tests are required. Ideally, old markings should be removed with appropriate mechanical procedures. Drying times of 1-C FLUOX daylight luminescent paint system can be prolonged if applied on old markings.

**Attention:** The 1-C FLUOX daylight luminescent paint system is not appropriate for large asphalt surfaces.

### 4.2 Concrete and cement-bound surfaces

The pavement components of new concrete surfaces that prevent good bonding (fine mortar layer, concrete slurries) must be appropriately removed (e. g. with high pressure waterjet, fine millcut, or similarly effective methods). When applying the paint on concrete or cement-bound surfaces, the formation of bubbles is likely to occur. In order to prevent bubble formation, the concrete should be pretreated with Primer for 1-C FLOUX daylight blended 1:1 with Thinner for HS-paint (Art.-No.: 3080) and sprayed with approx. 150 µm wet film thickness. Once dried the undiluted primer can be applied.

The humidity of concrete must not exceed 4% during application of the marking.

### 4.3 Bituminous surfaces

Any loose components such as chippings must be removed. Flux oils of new bituminous surfaces are detrimental to the bonding of markings and may lead to discoloration. Since these oils are not removable mechanically, the surface should be applied with Afterglow dispersion primer and after 4 - 6 weeks waiting time test markings (tests for adhesive properties and discoloration) should be conducted.

Furthermore, please consider that new bituminous surfaces applied indoors are not as good compacted as road asphalt. Therefore, marking cracks / chippings may occur underneath or on the sides of the markings. Please note the information stated in the Technical Information.

### 4.4 Cobbled pavement

Natural, artificial and compound stone pavements are non-static surfaces. Basically, they are not suitable for the 1-C FLUOX daylight luminescent paint system. No guarantee is given in case of crack formation, chippings caused by the movement of pavement parts, poor marking bonding (e. g. natural or artificial stones), penetration of moisture, wear of marking. Test applications with the 2-C FLUOX daylight luminescent paint system may be carried out. Please note the information stated in the Technical Information.

### 4.5 Floor coatings

The 1- C FLUOX daylight luminescent paint system is not suitable for floor coatings. We recommend the use of our 2- C FLUOX daylight luminescent paint system. Please note the information stated in the Technical Information.

### 4.6 Other surfaces

Inside buildings further surfaces are encountered (e. g.: PVC, wood, chipboards). Test markings with Primer for 2- C FLUOX daylight luminescent paint system are mandatory. Metal surfaces also need test markings. Please note the information stated in the Technical Information.

## 5 Application techniques

With marking airspray or airless machines or manually with spray gun or roller. Application of 1-C FLUOX daylight luminescent paint system must be conducted in the following sequence:

#### 1. 1-C Primer

apply evenly

#### 2. 1- C daylight luminescent paint

an even thickness results in uniform luminosity

#### 3. 1- C UV clear varnish

protects daylight paint against dirt, wear and prolongs live time

The above-mentioned layer thicknesses and the required number of spray operations have to be followed in order to get optimal daylight luminescent properties.

The 1-C FLUOX daylight luminescent paint thickness can be modified between 100 µm up to max. 600 µm depending on the intended effect. Regard waiting times stated in the spreadsheet. The 1-C UV clear varnish needs enough time for drying to avoid soiling of the varnish.