

TECHNICAL INFORMATION
2-C FLUOX
daylight luminescent paint system



2-C FLUOX daylight luminescent paint system

Art.-No.: 8119016 white, 2-C FLUOX Primer
Art.-No.: 811....., colored 2-C FLUOX daylight luminescent paint
Art.-No.: 8110000 transparent, 2-C FLUOX UV-clear varnish

Version: 2023-07-12

1	Main characteristics / Fields of application	3
2	Technical Data	3
3	Processing instructions.....	4
3.1	Preparation of material and application techniques	4
3.2	Optimizing of application properties	4
4	Surfaces / pre-treatment	4
4.1	General information	4
4.2	Concrete and cement-bound surfaces	5
4.3	Bituminous surfaces	5
4.4	Cobbled pavement	5
4.5	Floor coatings	5
4.6	Other surfaces	5
5	Application techniques	5

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

2-C FLUOX daylight luminescent paint system

- is a 3-layer marking system, consisting of:
 - 2-C primer,
 - 2-C daylight luminescent paint,
 - 2-C UV clear varnish
 and belongs to the group of aromatic free, solvent-containing 2-component paints
- the system needs all three layers to get enough daylight luminescent properties in different colors
- absorbs energy out of light by special pigments and realizes daylight luminescent effect
- is used for fluorescent coatings and is suitable for metallic surfaces (test application and pretreatment necessary)
- used for buildings, emergency exits, leisure facilities and on floors with increased impact
- suitable for indoor bituminous & concrete surfaces and most floor coatings
- suitable for airless- and airspray application techniques

2 Technical Data

3-layer system	1st layer	2nd layer	3rd layer
Product	Primer for 2-C daylight luminescent paint system	2-C daylight paint	UV clear varnish for 2-C FLOUX daylight luminescent paint system
Colors	8119016 / white	8111026 / luminous yellow 8112005 / luminous orange 8113024 / luminous red 8115400 / luminous blue 8116038 / luminous green	8110000 / transparent
Density	1.52 kg/l +/- 0.1	1.04 kg/l +/- 0.1	1.01 kg/l +/- 0.03
Mixture ratio	Base component : hardener (2-C Primer) : (SWARCODUR EP) 20 : 1	Base component : hardener (2-C.daylight paint) : (SWARCODUR PU/ACRYL) 5 : 1	Base component : hardener (2-C UV-clear varnish) : (SWARCODUR PU/ACRYL) 2 : 1
Thinner: on request	Thinner for 2-C EP (Art.-No.: 3130)	Thinner PU/ACRYL (Art.-No.: 8630)	Thinner PU/ACRYL (Art.-No.: 8630)
Thinner for cleaning	Thinner for 2-C EP (Art.-No.: 3130)	Special cleaner for marking machines (Art.-No.: 3086)	Special cleaner for marking machines (Art.-No.: 3086)
Potlife	approx. 1 day (reduced by high temperature)	approx. 1.5 hours	approx. 1.5 hours
Overcoatable after	approx. 3 hours	approx. 4 hours	/
Curing time / Overrollability	/	/	overnight*
Wet film thickness to be applied	approx. 200 µm - 400 µm ensure uniform and sufficient coverage	min. 100 µm - max. 600 µm if necessary up to 600µm to get enhanced luminous properties. Layers with more than 300µm thickness: spray in two layers	min. 60 µm - max. 100 µm if possible, spray in 2 thin layers
Theoretical consumption	approx. 0.304 kg/m ² (0,20 l/m ²) approx. 0.608 kg/m ² (0,40 l/m ²)	approx. 0.104 kg/m ² (0.1 l/m ²) up to approx. 0.624 kg/m ² (0.6 l/m ²)	approx. 0.06 kg/m ² (0.06 l/m ²) up to approx. 0.101 kg/m ² (0.1 l/m ²)
*Markings should be checked prior to opening to traffic			

www.swarco.com/rms

SWARCO LIMBURGER LACKFABRIK GmbH, Robert-Bosch-Straße 17, D-65582 Diez, Germany

T. +49-6432-9184-0, E. info.limburgerlackfabrik@swarco.com

Managing Director: Mario Nöllge

3-layer system	1st layer	2nd layer	3rd layer
Product	Primer for 2-C daylight luminescent paint system	2-C daylight paint	UV clear varnish for 2-C FLOUX daylight luminescent paint system
Standard packaging	5.0 l - Tin container 0.25 l – SWARCODUR EP	2.5 l - Tin container 0.5 l - SWARCODUR PU/ACRYL 5.0 l - Tin container 1.0 l - SWARCODUR PU/ACRYL	2.5 l - Tin container 1.25 l- SWARCODUR PU/ACRYL 5.0 l - Tin container 2.5 l - SWARCODUR PU/ACRYL 10.0 l - Tin container 5.0 l -SWARCODUR PU/ACRYL
	Other containers / filling weights on request		
Identification	The regulations and instructions concerning appropriate transport, handling, storage, first aid & 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.		
Storage stability	1 year (unmixed), in sealed original packaging; protect from frost and direct sun light		
Processing temperature	min. +5°C		
Surface temperature	+5°C up to +45°C		
Relative humidity	max. 75% (dew point spreadsheet has to be regarded)		

3 Processing instructions

3.1 Preparation of material and application techniques

All three products of the 2-C FLUOX daylight luminescent paint system must be homogeneously stirred in its original container before processing. The exact machine adjustments have to be done according to the manufacturers` instructions. Layer thickness has to be evenly distributed to get consistent daylight properties.

Theoretical material consumption is stated in:

- Table “Theoretical material- and drop-on consumption” on our website.

Machines and tools must be cleaned before the paint cures, using Thinner for 2-C paints (see point 2) 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 materials` spray properties by adding max. 2% Thinner (see point 2). Use thinner recommended by manufacturer only.

4 Surfaces / pre-treatment

4.1 General information

The surface must be dry, clean and free from grease, oil, loose gravel & other contaminations. The surface and any existing markings must be checked for their carrying capacity and compatibility with the material to be applied. In case of doubt, application and adhesion tests are required. Ideally, old markings should be removed with appropriate mechanical procedures. Drying/curing time of 2-C FLUOX daylight luminescent paint system can be prolonged if 2-C FLUOX daylight luminescent paint system is applied on old markings.

Attention: The 2-C FLUOX daylight luminescent paint system is not appropriate for large asphalt surfaces.

4.2 Concrete and cement-bound surfaces

Parts on new concrete surfaces that prevent good bonding (fine mortar layer, concrete slurries) must be appropriately removed (e. g. with high pressure water jet, fine mill cut, or similarly effective methods). When applying the paint to concrete or cement-bound surfaces, the formation of bubbles is likely to occur. In order to prevent the formation of bubbles the concrete should be pretreated with Primer for 2-C FLUOX daylight paint blended 1:1 with Thinner for 2-C EP (Art.-No.: 3130) and sprayed with approx. 150 µm wet film thickness. Once dried the undiluted Primer can be applied.

Humidity of concrete must not exceed 4% during the marking work.

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 discolouration. Since these oils cannot be removed mechanically, the primer should be applied after 4 - 6 weeks waiting time in order to conduct bonding and to avoid discolouring.

The following should also be taken into consideration: new bituminous surfaces applied inside are not as good compacted as road asphalt. Therefore, underneath the marking or side wards the marking cracks / chippings may occur. Note information stated in the technical information.

4.4 Cobbled pavement

Natural, artificial and compound stone pavements are loose surfaces that move. Basically, these are not suitable surfaces for the 2-C FLUOX daylight luminescent paint system. No guarantee is given in cases 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 are recommended. Joints of cobbled pavement remain visible at the surface of 2-C FLUOX daylight luminescent paint system.

4.5 Floor coatings

Synthetic resin floor products usually consist of epoxy resins or polyurethane. They are differentiated into sanded and non-sanded coatings. Such coatings must be considered as critical surfaces. If the synthetic resin coatings are older than 3 days, it is essential for a successful application of 2-C FLUOX daylight luminescent paint system, that the floor is roughened with adequate means (e. g. Blastrac, fine mill cut or grinding). If the marking is applied within 2 days after coating application, roughening is not necessary. Due to the variety of different floor coatings we recommend conducting test applications, bonding and coating checks. Technical Information is contained in the product data sheets, which give hints and tips about markings. If necessary, contact our technical service department.

4.6 Other surfaces

Inside buildings different surfaces are possible (e. g.: PVC, wood, chipboards). Test markings with Primer for 2-C FLUOX daylight luminescent paint system are mandatory. Metal surfaces need pre-treatment and test markings.

5 Application techniques

With marking air spray /airless machines or by hand spray gun or roller.

Application of 2-C FLUOX system is to be conducted in the following sequence:

1. 2-C FLUOX primer

apply evenly

2. 2-C FLUOX paint

apply evenly

depending on applied thickness: two layers are necessary

3. 2-C FLUOX UV clear varnish

protects FLUOX paint against dirt and wear and prolongs lifetime

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

Paint thickness can be modified between 100 µm to max. 600 µm, depending on required daylight luminescent effect. Follow instructions regarding waiting times stated in the spreadsheet.

The 2-C FLUOX clear varnish needs to be allowed sufficient time to dry. Varnished surfaces can otherwise become soiled or damaged and black tire tracks may occur.