

TECHNICAL INFORMATION  
SWARCOCRYL 2-C Indoor



# SWARCOCRYL 2-C Indoor

Art. No.: 1086, white

Art. No.: 28....RAL ..., colored

Version: 2022-08-04

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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

## SWARCOCRYL 2-C Indoor ...

- is a high quality, aromatic-free 2-component paint containing solvent, on basis of modified acrylic polyols in combination with an aliphatic polyisocyanate
- is characterized by excellent resistance against chemicals and abrasion, good durability, and little tendency to attract dirt due to its chemical reaction which occurs besides physical drying through evaporation of the solvent
- is ideal for markings in car parks, warehouses and industrial buildings where conventional systems are not suitable
- combined with 2-Comp. UV clear varnish it reduces the attraction of dirt on surfaces with heavy impact (on concrete and floor coatings) and increases abrasion resistance
- is particularly recommended in areas with frequent rubber attrition (forklift impact)
- has been tested by the Institute of Paints and Varnish (ILF, Magdeburg) for its chemical resistance against various aggressive substances in line with DIN 68861, part 1 (test report available)
- suitable for airless and air spray applications

## 2 Technical Data

<b>Color</b>	White, other colors upon request																		
<b>Density</b>	approx. 1.18 kg/l +/- 0.04 kg/l (with SWARCODUR hardener)																		
<b>Mixing ratio</b>	base component SWARCOCRYL 2-C Indoor: hardener (SWARCODUR PU/ACRYL) = 5 : 1																		
<b>Curing time</b>	Approx. 1,5 hours with 200µm layer thickness. When using the SWARCOCRYL 2-C Indoor in industrial halls with forklift traffic, driving is only recommended after > 12 h. That are laboratory values that may differ from field conditions depending on climate (temperature, humidity, wind), material, layer thickness and surface. In general, the marking's trafficability must be checked before exposing it to traffic impact.																		
<b>Pot life</b>	approx. 1 day																		
<b>Solid content</b>	min. 55%																		
<b>Thinner</b>	When needed add 2% Thinner PU/ACRYL (Art. No.: 8630) to optimize spray properties. For cleaning of machines and tools use Special cleaner for marking machines Art. No.: 3086																		
<b>Storage stability</b>	6 months (unmixed), in sealed original packaging; protect from frost and direct sun light																		
<b>Standard packaging</b>	<b>SWARCOCRYL 2-C Indoor:</b> 12.5 l tin cans <b>SWARCODUR PU/ACRYL:</b> 2.5 l cans (corresponds with mixing ratio)																		
<b>Drop-on material</b>	Usually there is no drop-on material applied for indoor and car park applications because of their tendency to attract dirt. Should skid resistance be a particular issue, 0.25 kg/m <sup>2</sup> of pure skid resistance particles (e.g. cristobalite sand M72, Art.-No.: RH11130) can be dropped onto the wet film. In general, there are no requirements regarding retro reflection.																		
<b>Identification</b>	The regulations and instructions concerning appropriate transport, handling, storage, first aid measures, toxicology and ecology are stated in our material safety data sheets! The instructions stated on the product label and in the MSDS must be followed.																		
<b>Processing temperature</b>	min. +5°C																		
<b>Surface temperature</b>	+ 5°C to +45°C																		
<b>Relative humidity</b>	max. 75 % (dew point spreadsheet has to be regarded)																		
<b>Layer thicknesses / Theoretical consumption</b>	<table border="1"> <tr> <td>Wet film thickness:</td> <td>200 µm</td> <td>300 µm</td> <td>400 µm</td> <td>500 µm</td> <td>600 µm</td> </tr> <tr> <td>Dry film thickness:</td> <td>78 µm</td> <td>117 µm</td> <td>155 µm</td> <td>194 µm</td> <td>233 µm</td> </tr> <tr> <td>Theor. consumption:</td> <td>0.24 (0.20)</td> <td>0.35 (0.30)</td> <td>0.47 (0.40)</td> <td>0.59 (0.50)</td> <td>0.70 (0.60) kg/m<sup>2</sup> (l/m<sup>2</sup>)</td> </tr> </table> <p>The actual consumption depends on the applied layer thickness and the type and state of the surface.</p>	Wet film thickness:	200 µm	300 µm	400 µm	500 µm	600 µm	Dry film thickness:	78 µm	117 µm	155 µm	194 µm	233 µm	Theor. consumption:	0.24 (0.20)	0.35 (0.30)	0.47 (0.40)	0.59 (0.50)	0.70 (0.60) kg/m <sup>2</sup> (l/m <sup>2</sup> )
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## 3 Processing instructions

### 3.1 Preparation of material and application techniques

Before processing, SWARCOCRYL 2-C Indoor must be homogeneously stirred in its original container. Then the hardener (SWARCODUR PU/ACRYL) must be added and stirred uniformly into the base component at the stated mixing ratio (5:1). Any remaining material should not be left in the machine overnight due to the pot life of 1 day.

The exact machine adjustments depend on the application conditions, type of machine (airless or air spray), requested film thickness, according to the machine manufacturer's instructions.

The theoretical consumption is listed in the table "Theoretical consumption of material and drop-on materials" on our website in kg/m<sup>2</sup> as well as in kg/km of line to be marked depending on typical line width.

The cleaning of machines (paint tank and hoses) and tools must be done before the curing is complete. Clean before applying SWARCOCRYL 2-C Indoor with Thinner PU/ACRYL (Art.-No.: 8630) or Special cleaner for marking machines (Art.-No.: 3086) exclusively. Avoid any blending with other marking materials or thinners. It is recommended that remaining paint from the previous day should be applied first, only then refill newly mixed paint.

### 3.2 Optimizing application properties

SWARCOCRYL 2-C Indoor is ready for processing upon delivery. In general, it is not necessary to add thinner but for optimizing the material's spray properties (after the hardener is mixed into the base component) approx. 2% Thinner PU/ACRYL (Art.-No.: 8630) can be added. Use recommended thinner only. It is also recommended first to process the remaining paint of the day before, before filling in the new with hardener mixed paint.

## 4 Surfaces / pretreatment

### 4.1 General information

The surface must be dry, clean 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 techniques.

**Attention:** SWARCOCRYL 2-C Indoor is not appropriate for large area applications on bituminous surfaces (e.g. playground, sportsground, cycle path or similar).

### 4.2 Concrete and cement-bound surfaces

The pavement components that prevent good bonding, especially on new concrete, including fine mortar layers, concrete slurries, concrete after-treatments as setting retarders, paraffin, impregnations on silicate basis etc. must be appropriately removed (e.g. with high pressure waterjet, fine mill-cut or similar). We recommend conducting test applications. In case of doubt communicate concerns in written form. Steel fiber concrete is not a suitable surface for SWARCOCRYL 2-C Indoor.

When applying the paint on concrete or cement-bound surfaces, the formation of bubbles is likely. In order to prevent bubble formation, the concrete should be pretreated with 2-C EP-primer (Art. No.: 8609000) using a roller or spray technique.



Alternatively, blended SWARCOCRYL 2-C Indoor (1:1 with Thinner PU/ACRYL, Art. No.: 8630) is applicable. Once dried, a second, undiluted layer can be applied. The humidity of concrete must not exceed 4% during application.

### 4.3 Bituminous surfaces

Any loose components such as chippings must be removed. On new asphalt surfaces additives (flux oils, adherents etc.) are detrimental to good bonding of markings and can cause discolorations on marking paints. Prior to the application, test markings / bonding checks are recommended. Since a mechanical removal is hardly possible, bonding checks are absolutely necessary, in case of doubt communicate concerns in writing.

If marking test results are negative (conduct tests 3 days after application) we recommend: Apply LIMBOROUTE 2-C K809 without any guarantee. Bituminous layers at car parks or factories are less compact compared to road asphalt. Therefore, marking materials may cause crack formation on such surfaces.

### 4.4 Cobbled pavement

Natural, artificial and compound stone pavements are non-static surfaces. Basically, they are not suitable for SWARCOCRYL 2-C Indoor. 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.

### 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 critical surfaces. If the synthetic resin coatings are older than 3 days, it is essential for a successful application of SWARCOCRYL 2-C Indoor 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 the application of the coating, roughening is not necessary. Due to the variety of different coatings we recommend conducting test applications and bonding checks and to check the coatings' Technical Information, which may contain valuable information regarding markings.

## 5 Application techniques

With conventional marking machines (airless or atomizing technique), manually with brush or roller. SWARCOCRYL 2-C Indoor must be homogeneously stirred in its original container. Then the liquid hardener SWARCODUR PU/ACRYL (Art.-no.: 8620) is mixed with the base component at the indicated mixing ratio while using an appropriate stirring device. Never prepare more material with hardener than is needed for the application (observe pot life).

The exact machine adjustments depend on the application conditions, type of machine, requested wet film thickness and need to be made according to the machine manufacturer's instructions. When the applied SWARCOCRYL 2-C Indoor has dried, it is possible to apply, if required, a second layer of approx. 0,1 mm 2-C UV-clear varnish in order to improve the abrasion resistance and dirt-repellent characteristics.

**Attention:** Machine-applied markings in car parks or factory facilities might not be fully applicable near walls for technical reasons. It is recommended to clarify in advance whether the costly manual completion of the striping is required. The uniform spread of marking material over the entire application surface must be observed.