

# CONIFLOOR 535 ESD

Two part PUR sealing lacquer, conductive, water based, pigmented with a silk-matt finish for ESD-protection zones.

## Product description

CONIFLOOR 535 ESD is a water based, solvent free, low emission and pigmented two-component silk-mat finished PUR sealing lacquer for ESD-protection zones (EPA).

## Fields of application

CONIFLOOR 535 ESD is generally used for the production of coloured, electrostatic dissipative sealing on dissipative AS and ESD coatings indoors. It is suitable for surfaces in ESD protection zones where a low electrostatic charge (charge to persons) and an electrostatic dissipative surface is required (EPA). Typical applications are in the semiconductor, electronics and automotive, microbiology and pharmaceutical industries, where the system must meet requirements of EN 61340-5-1.

CONIFLOOR 535 ESD is also UV and colour stable and abrasion resistant.

## Properties

CONIFLOOR 535 ESD has a good adhesion spectrum on hard top coats, is abrasion resistant and very resistant to scratches.

CONIFLOOR 535 ESD has good mechanical and chemical resistance after complete curing and is used as an ESD sealant in the systems

- CONIFLOOR IES AS ESD
- CONIFLOOR IES ESD
- CONIFLOOR IET ESD
- CONIFLOOR IPS AS ESD

and other systems.

## Technical Data

<b>Mixing ratio</b>	in parts by weight		4 : 1
<b>Density</b>	mix, at 23 °C	g/cm <sup>3</sup>	1.3
<b>Pot life (10kg mixture)</b>	at 20 °C	Min	>60
<b>Re-coating interval</b>	min., at 23 °C, 50 % rel. humidity	h	18 - 24
	max. at 23 °C, 50 % rel. humidity	h	30
<b>Ready for foot traffic</b>	at 20 °C, 50 % relative humidity	h	18 - 24
<b>Fully cured - ready for exposure to chemicals</b>	at 23 °C, 50 % relative humidity	d	7
<b>Substrate and application temperature</b>	at least	°C	5
	maximum	°C	20
<b>Permissible relative humidity</b>	maximum	%	75
<b>Resistance to ground (EN 61340-4-1)*</b>		Ohm	min. R <sub>g</sub> < 10 <sup>9</sup>
<b>Resistance system (EN 61340-4-5)*</b>		Ohm	min. R <sub>s</sub> < 10 <sup>9</sup>
<b>Body voltage / walking test (EN 61340-4-5)*</b>		V	< 100 V

*Above figures are guide values and should not be used as a base for specifications!*

*\* The named conductivity values are achieved in conjunction with the named CONICA systems!*

## Application method

The [temperature](#) of both components should be between +15 - +25°C.

CONIFLOOR 535 ESD is supplied in the correct proportions of component A (resin) and component B (hardener). Pour component B into component A and ensure that the pail containing component B is emptied completely.

To achieve a homogenous mix, thoroughly mix with a slow rotating mixing device at about 300 rev/min.

Ensure that the mixing device reaches the side and bottom areas of the mixing vessel.

The **mixing** process takes approximately **2-3 minutes** and should be performed until the blend is **homogenous** and streak free.

**Do not** use the product out of the mixing pail. Pour the mix into another **clean** pail and mix it again for 2 more minutes. **After mixing, allow to stand for 10 minutes.**

CONIFLOOR 535 ESD is normally applied to the pre-treated substrate by **rolling** with a "Microtex" roller (Pile height: 10-12 mm). Roll out well and keep the **overlap** areas to a **minimum**.

It is necessary to **re-roll** freshly applied material with a second clean paint roller in order to obtain a uniform surface with a minimum of overlap marks.

The ambient, material, air circulations and substrate temperature influence the pot life and curing time of CONIFLOOR 535 ESD. At low temperatures, chemical reactions are generally slowed down; this lengthens the pot life, re-coating interval and open time. At the same time, the viscosity increases which leads to a higher consumption.

**Important:** Make sure that doors and windows are closed, to **avoid air circulation** during the application and curing. Airflow can **negatively** influence the optical properties by creating roller marks. High temperature and humidity accelerate chemical reactions so the contrary is true.

To fully cure the material, the substrate and working temperature must not fall below the minimum.

After application, the material have to be protected from direct contact with water. Within this period, water could cause swelling of the sealing lacquer or stain.

#### Consumption

The consumption of CONIFLOOR 520 CW is approximately between 0.14 – 0.18 kg/m<sup>2</sup>

#### Note for checking the conductivity:

To check the conductivity, the guideline values actual state of the art report "Conductive coatings for industrial floors" Deutsche Bauchemie e.V. recommended. Note: Before applying the conductive coating, the CONIFLOOR 150 conductive layer and the following conductive coating must be measured.

Surface of coating system	Amount of measurements
< 10 m <sup>2</sup>	1 measurement / m <sup>2</sup>
10 – 100 m <sup>2</sup>	10 – 20 measurements
> 100 m <sup>2</sup>	10 measurements / 100 m <sup>2</sup>

Distance of the measuring points at least 50 cm. Measured e.g. with a MetrISO 2000 or 3000 measuring device. The measured value of the conductive layer should not exceed 10-15 kOhm. If the required measured value is not reached, further measurements must be done within 50 cm, which should then reach the measured value.

#### Cleaning agent

Re-usable tools should be cleaned carefully with water.

#### Substrate condition

CONIFLOOR 535 ESD is a hard top coat and is applied on our hard CONIFLOOR coatings CONIFLOOR 420 AS, CONIFLOOR 430 AS, CONIFLOOR 435 ESD or others as considering the expected mechanical stress to the system.

Substrates to be coated have to be firm, dry, load bearing and free of loose and brittle particles and substances which impair adhesion such as oil, grease, rubber skid marks, paint or other contaminants.

Sealing with CONIFLOOR 535 ESD needs to be done latest **within 2 days** (20°C) after latest application. Indicated re-coating intervals have to be kept.

The **temperature** of the substrate must be at least **3 °C** above the current dew point temperature.

#### Pack size

CONIFLOOR 535 ESD is supplied in 10 kg working packs. A and B component are supplied separately in the correct proportions.

#### Colour

Standard colours RAL 7032 and RAL 7035 – further colours upon request

#### Storage

Store in original closed pails under dry conditions at a temperature range of 10 - 25 °C.

**Important:** Product is sensitive to **frost!**

Do not expose to direct sunlight.

Before use, please see "best before" date on the pail / drum.

#### Safety precautions

CONIFLOOR 535 ESD is non-hazardous in its cured condition.

For protective measures, transport regulations and waste management please refer to the Material Safety Data Sheet of the product.

#### VOC contents

CONIFLOOR 535 ESD meets the requirements of the EC directive 2004/42/EC.



#### CE-Label:

See Declaration of Performance.

CONICA AG  
Industriestrasse 26  
8207 Schaffhausen  
Suisse

Tel.: + 41 52 644 3600  
Fax: + 41 52 644 3699  
[info@conica.com](mailto:info@conica.com)  
[www.conica.com](http://www.conica.com)

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