

Product

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Phoenix Release RC50F (PSA release coating)**Product description**

Phoenix release RC50F is a coater ready release coating suitable for paper liner, film liner and other materials incl. non- wovens

The RC50F coating can be applied via different coating processes like gravure (Flexo), doctor blade and multi roll coating technology. The coating needs to be cured with UV light, inertisation (N₂ blanket) is required to a level of <50ppm residual O₂.

The RC50F coating will result in an easy release level, depending on adhesive used.

Features

The RC50F is a fast-curing release coating, which leads to a high level of cross- linking due to the high functionality. This results in less silicone migration towards the pressure sensitive adhesive.

- Designed for easy release applications.
- Suitable for medium-pressure UV and UV- LED curing technology.
- High SA% with stable release force.
- Suitable for indirect food contact applications after complete UV- curing.
- Excellent coating performance and coating quality.
- Good anchorage on film and paper.
- Suitable for a wide range of pressure sensitive adhesives.

Precautions

The product can be stored in a dry environment with temperature between 5 – 40 °C. The shelf life is 12 months from date of production. RC50F needs to be stirred for at least 5 mins. prior to application. Close container immediately after usage.

Pre- printed inks need to be well cured and not contain (non- reactive) additives or ingredients which can influence the RC negatively.

Product performance

| Property | Value | Units |
|--------------------------------|-------------|---------|
| • Viscosity: | 800 – 1.000 | mPa.s |
| • Appearance: | milky white | |
| • RF Tesa 7475 FTM3: | 5-10 | cN/25mm |
| • RF Tesa 7475 FTM10: | 5-10 | cN/25mm |
| • RF Tesa 4090 (Hotmelt) FTM3: | 5-10 | cN/25mm |
| • RF Tesa 4090 FTM10: | 5-10 | cN/25mm |
| • Subsequent Adhesion FTM3: | >90 | % |

Important checks

- The UV- curing system need to have sufficient performance and UV dose.
 - Regular maintenance of quartz plate, UV lamps, reflectors is for good and stable curing results essential.
 - Oxygen level in the nitrogen chamber needs to be below 50 ppm.
- Corona treatment will improve anchorage.
- Coating weight depends on the roughness of the substrate and adhesive used.
- Coating quality needs to be tested on paper with methylene blue, no pinholes.
- Loop test: Apply an ~20cm tape on the cured silicone. Peel it off and form a loop by putting the adhesive side together. Check by opening the loop if there is silicon migration to the adhesive.

Background

The information is based on our experience. Because of the differences in materials for printing, processing conditions and test criteria this information can only be of an advisory nature. Our data reflect the latest state of our knowledge and are based on the characteristics established in the laboratory and on practical experience. Your own tests with the original materials under the respective conditions are indispensable. We disclaim any liability for applications for which this product is not foreseen. The user must determine under his own production conditions if the product meets his requirements.