

Product

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Phoenix Release RC20F**Product description**

Phoenix release RC20F is a coater ready release coating, suitable for linerless, PSA- labels, tapes, and hygiene applications.

The RC20F 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 RC20F coating will result in a controlled- tight release level with permanent adhesives. Easy release values can be achieved with removable or microsphere adhesives.

Features

The RC20F is a fast-curing release coating, which guarantees a high level of cross- linking. This results in very low silicone migration towards the pressure sensitive adhesive.

The RC20F release coating does have:

- Excellent coating anchorage on paper and film substrates.
- Suitable for medium-pressure UV and UV- LED curing technology.
- High mechanical and chemical resistance.
- Release force depend on the adhesive strength of the adhesive.
- Suitable for indirect food contact applications after complete UV- curing.
- Excellent coating performance and coating quality.
- Suitable for a wide range of pressure sensitive adhesives.
- Very high SA%, with stable release force.

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. RC20F needs to be stirred for at least 5 mins. prior to application. Close container immediately after usage. For pre-printed inks please check the following requirements:

- Pay attention that the inks are well UV- cured or heat dried.
- Check the adhesion of the ink on the substrate prior applying the RC.
- Inks should not contain (non-reactive) silicone additives, waxes or any other surface-active ingredients which can influence the RC negatively.

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Product performance RC20F

Property	Value	Units
• Viscosity:	600 - 800	mPa.s
• Appearance:	milky white	
• RF Tesa 7475 FTM3:	35-45	cN/25mm
• RF Tesa 7475 FTM10:	35-45	cN/25mm
• RF Tesa 4090 FTM3:	20-30	cN/25mm
• RF Tesa 4090 FTM10:	20-30	cN/25mm
• Subsequent Adhesion FTM11:	> 98	%

Important checks

- The UV- curing system need to have a sufficient performance and UV dose.
 - Regular maintenances of the system are 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.
- Coating quality on paper needs to be tested 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.