

Product

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Phoenix Release RC500F (PSA release coating)**Product description**

Phoenix Release Coating RC500F is a coater ready release coating suitable for paper liner, film liner and other materials incl. non-woven.

The product can be applied via different coating technologies like gravure (Flexo), doctor blade and multi roll coating technology. The coating needs to be cured with UV radiation. Nitrogen inerting (N₂ blanket) is required to a level of <50ppm residual O₂ for complete curing.

The RC500F coating will result in an easy release level, depending on adhesive used.

Features

Phoenix RC500F 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.
- Excellent anchorage on paper and film substrates.
- High SA% with stable release force.
- Suitable for a range of pressure sensitive adhesives.
- High mechanical and chemical resistance.
- Suitable for indirect food contact after complete curing.
- Excellent coating performance and coating quality.

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. RC500F 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.

Phoenix Release

Product performance

Property	Value	Units
• Viscosity:	700 – 950	mPa.s
• Appearance:	milky white	
• RF Tesa 7475 FTM3:	10-15	cN/25mm
• RF Tesa 7475 FTM10:	10-15	cN/25mm
• RF Tesa 4090 FTM3:	5-10	cN/25mm
• RF Tesa 4090 FTM10:	5-10	cN/25mm
• Subsequent Adhesion FTM11:	>90	%

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 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.