



Product

Oct 2024

Phoenix Release RC117F

Description

Phoenix release RC117F is a coater ready release coating suitable for paper liner, film liner and other materials for low release application.

The RC117F can be applied via different coating technologies.

UV- curing only with nitrogen-inert UV- systems. Rest oxygen level < 50ppm.

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Features

The RC117F is a fast-curing release coating, which leads to a high level of cross-linking. This results in less silicone migration towards the pressure sensitive adhesive.

- Designed for easy release applications < 10cN/25mm.
- 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. **RC117F needs to be stirred for at least 5 mins with a motor driven high speed agitator prior to application and continually mixed and recirculated during use to maximize consistency.** 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.

Performance

Property	Value	Units
• Viscosity:	600 – 800	mPa.s
• Appearance:	milky white	
• RF Tesa 7475 FTM3:	6-8	cN/25mm
RF Tesa 7475 FTM10:	7-9	cN/25mm
• RF Tesa 4090 (Hotmelt) FTM3:	3-5	cN/25mm
RF Tesa 4090 FTM10:	4-7	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, reflector and nitrogen supply is indispensable for safe and stable curing results essential.**
- Corona treatment will improve anchorage and wetting.
- 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.