

Product

June 2022

Phoenix Release RC20**Product description**

Phoenix release RC20 is a coater ready release coating, suitable for thermal linerless, self- adhesive tapes and hygiene products

The RC20 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 RC20 coating will result in a controlled- tight release level, depending on adhesive used. The release force can be reduced by adding Phoenix Release RC50.

Features

The RC20 is a fast-curing release coating, which guarantees a high level of cross- linking under normal production conditions. This results in very less silicone migration towards the pressure sensitive adhesive.

The RC20 release coating does have:

- Excellent coating anchorage on paper and film substrates
- High mechanical resistance
- Excellent chemical resistance
- High moisture resistance
- Controlled- tight release, depending on the adhesive
- Excellent coating performance and coating quality
- Suitable for a wide range of pressure sensitive adhesives; acrylic water based and – solvent as well as standard and UV curable hotmelts
- Stable release force, immediately and after aging

Precautions

The Phoenix release RC20 formulations needs to be stirred for at least 5 mins. prior to application. The RC20 formulation can be stored in a dry environment with temperature between 5 – 40 °C. The shelf life is 12 months from date of production. Close container immediately after usage.

Product performance RC20

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 factors

It is of crucial importance that the machine set up is correct:

- Using a Corona treater prior to applying the release coating will improve anchorage
- UV lamps need to have the correct output and need to be clean
- Quartz plate, protecting the UV lamps, needs to be clean. If not cleaning with IPA or EtAc is required
- The Nitrogen blanket needs to function well; Oxygen level needs to be below 50 ppm in UV chamber
- Anilox roll or multi roll coating head needs to be cleaned prior to coating job; at least 1g/m² of the RC20 coating needs to be applied
- Coating quality needs to be tested on paper with methylene blue, no pinholes

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.