

Product

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Phoenix Silicone Polymer RC60, cationic curable (2- components)**Product description**

Phoenix Release RC60 is a composition of high molecular weight silicone pre-polymer with cycloaliphatic epoxide groups suitable for paper liner, film liner and other materials incl. non- wovens. RC60 contains no Photoinitiator. With the addition of 2% Photoinitiator PI91 is RC60 ready for use. PI91 must be stirred well into the silicone polymer. The product can be applied via different coating processes like gravure (Flexo), doctor blade and multi roll coating technology. RC60 does not require nitrogen inerting and can be cured under atmospheric conditions. The coating will result in an easy release level, depending on adhesive used.

(M) Matte setting can be applied.

Features

The RC60 is a fast-curing silicone polymer, which guarantees a high level of cross- linking under normal production conditions. Due to the high cross-linking speed the cure is excellent, resulting in less silicone migration towards the adhesive and high subsequent adhesion levels.

The RC60 release coating does have:

- Excellent coating anchorage on paper and film substrates
- High mechanical resistance
- Good chemical resistance
- Excellent coating performance and coating quality
- Stable release force

Precautions

PI91 needs to stirred well (at least 3 min.) into the RC60 prior to the application. The RC60 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.

When pre- printing prior to apply the Phoenix RC60, it must be checked if the printing ink has a negative influence on the UV curing of the RC60. Inks may contain ingredients that inhibit curing of cationic systems.

Product performance RC60

Property	Value	Units
• Viscosity:	400 - 600	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:	>95	%

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 (medium pressure Hg)
- Quartz plate, protecting the UV lamps, needs to be clean. If not cleaning with IPA or EtAc is required
- Anilox roll or multi roll coating head needs to be cleaned prior to coating job; at least 1gm² of the RC60 coating needs to be applied
- Coating quality needs to be tested on paper with methylene blue, no pinholes
- The intended substrate must be tested prior to use. Some additives can poison the cure (Amines, Phosphides)

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.