

# SYL-OFF™ EM 7978 Coating

## Emulsion release coating system for food release applications

### Features and benefits

- Premium food and bakery release
- Outstanding water repellency
- Designed for paper machine application
- Reduced dusting
- Compatible for off-line coating
- Low coat weight
- Low catalyst level

### Applications

- Release coating for bakery and food release application
- Release coating for non-stick packaging
- Release coating for industrial release papers

### Formulated with

- SYL-OFF™ EM 7975 Catalyst Emulsion
- SYL-OFF™ 7989 Antifoam
- Thickeners



### Adds value to your end product providing non-stick performance for use in food release applications

Food release liner's major function is to perform an easy and clean release from the surface of processed food.

In recent years, several market trends have influenced the growth of various food contact papers. In addition to economic drivers the food contact segment has been driven by environmental considerations, both on the part of manufacturers and consumers.

### Trends in food release applications

- Move away from heavy metal-based coatings such as chromium (viewed as toxic when incinerated)
- Requiring easy to use (no cleaning on surfaces in contact with food after heating and/or baking)

- Focus on cost in use reduction
- Focus on sustainability (Recyclable liner, renewable materials, energy consumption efficiencies, etc.)
- Fast food and processed food market is growing fast

The trends continue to drive changes in the coated paper industry. Silicone coatings for bakery papers are becoming more popular. The change to silicone-coated paper does not necessarily lead to an increase in cost of use because of factors such as coat weight reduction and better performance.

There are several drivers for change in the food contact paper segment. The search for higher product value by paper mills encourages the development of value-added products.

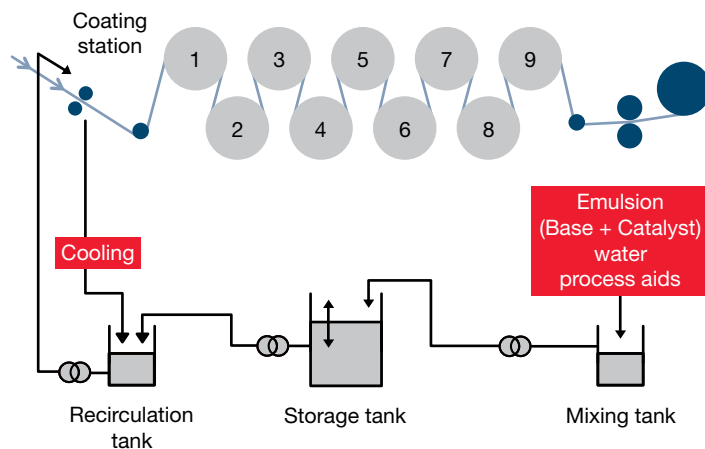


## Food release paper – Drivers for change

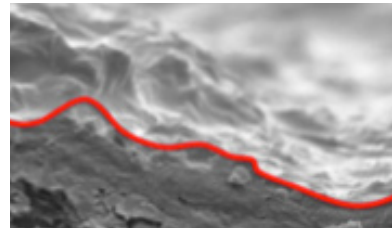
- Environmental arguments
- Value added products at the paper mills
- Ease of application (equipment cost)
- Predictability and consistency of performance
- Growing corporate social responsibility

Emulsion technology is the preferred coating method for a variety of applications including food contact. This technique is based on a platinum-catalyzed reactive system. This method produces low levels of byproduct and is in fact commonly used for curing silicone for medical applications, where safety and purity are sensitive issues.

Application of the silicone emulsion is easy and can be done in-line as part of the paper manufacturing process, eliminating the need for a separate process by a converter. As part of the on-line process, the reactive silicone emulsion is applied to the paper before the last drying step, and the silicone is dried and cured in the final process stage.



The Emulsion release coating can be applied by a multitude of coating techniques:



- Size press or film press
- Direct or off-set gravure
- Rod/Meyer bar

## General properties of siliconized paper:

- Outstanding release properties: multiple uses
- Water repellent: Cobb60  $\approx$  8 to 15 g/m<sup>2</sup>
- A unique paper coated with as low as 0.20 g/m<sup>2</sup> of silicone

## Food contact regulations

- Americas food regulation:
  - 21 CFR Section 176.170: “Components of paper and paperboard in contact with aqueous and fatty foods”
  - 21 CFR Section 176.180: “Components of paper and paperboard in contact with dry foods”
- Europe food regulation:
  - BfR recommendation XXXVI: “Paper and board for food contact”
  - BfR recommendation XXXVI/2: “Paper and Paperboard for Baking Purposes “
- Kosher

Contact your local Dow representative for current compliance information

## Contact us for more information

For product data sheets, selection guides and an overview of Dow's comprehensive line of products and services for the pressure sensitive industry, visit [www.dow.com/psi](http://www.dow.com/psi).

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