



# Owensboro Specialty Polymers, Inc.

Chemistry that Connects, People that Care

## Technical Data Sheet

### SERFENE™ 400

#### PVdC Latex High Barrier Coating/Heat Seal Coating

##### Description

Serfene 400 is a high barrier, general purpose, polyvinylidene chloride (PVDC) latex with good heat sealability. Materials coated with Serfene 400 have excellent resistance to water vapor, gases, and grease. This latex is recommended for coating paper and primed plastic films. It is also recommended for thermoforming applications. On plastic films, a primer is necessary for adequate adhesion.

This high molecular weight PVDC polymer has excellent extensibility even after full crystallization. This property is unique for a high barrier PVDC.

##### Application Methods

The conventional methods of wire wound metering rods (Mayer rod) or air knife work well with this product. Serfene 400 exhibits good flow and wetting. The foaming tendency of the latex is controlled by proper handling procedures. Serfene latex is acidic, therefore metal surfaces that are in contact with the wet latex need to be fabricated from corrosion resistant materials such as 316 stainless steel or plastic.

##### Typical Emulsion Properties\*

Solids	58%
Weight/Gallon	10.9 LBS
Viscosity	10 cps (Brookfield RVT, #1 @ 20 rpm)
Surface Tension	38 dynes/cm (Krüss Tensionometer)
pH	1.8
Color	Creamy White
Alcohol Tolerant (IPA)	No
Freeze/Thaw Stability	None
Recommended Shelf Life	180 days (unopened containers) @ 25°C
Storage Conditions	>40° F (5° C), <85° F (30° C)

\*These items are provided for general information only. They are approximate values and are not considered part of a production specification.

##### Typical Film Properties

The following properties are typical for 6 LBS/ ream coating total coating weight when applied in two passes onto glassine paper.

Water Vapor Transmission		0.2-0.4 gms/100 <sup>2</sup> in/24 hrs.	
Oxygen Transmission		0.4-0.8 cc/100 in <sup>2</sup> /24 hrs.	
Minimum Sealing Temperature		240-250°F @ 20 psi and 1 sec. dwell.	
COF	Static	Coating to coating	0.7 (0.4 aged)
		Coating to polished steel	0.2 – 0.3
	Kinetic	Coating to coating	0.5 (0.4 aged)
		Coating to polished steel	0.2
Block Resistance		Non-blocking to paper.	