



Technical Data Sheet

SERFENE™ 2060

PVdC Latex Barrier Primer, Extrusion Primer, & Jaw Release Coating

Description

Serfene 2060 is a polyvinylidene chloride (PVDC) copolymer emulsion that is self-adhering to a variety of substrates including acrylics, treated polypropylene, treated polyethylene, polyamides, treated polyester, and paper as well as PVDC coated substrates. Serfene 2060 can decrease oxygen permeation down to less than 1 cc O₂/100 in²/24 hrs on oxygen permeable substrates such as polyolefins. Serfene 2060 can be formulated to exhibit jaw release properties. When used as a jaw release coating, the barrier properties may be affected by the amount of formulation ingredients.

Serfene 2060 is a low foaming emulsion which is compatible with isopropyl alcohol.

Typical Emulsion Properties*

Solids	50%
Weight/Gallon	10.45 LBS
Viscosity	10 cps (Brookfield RVT #1 @ 20 rpm)
Surface Tension	45 dynes/cm (Krüss Tensionometer)
pH	1.5
Color	Creamy white
Alcohol Tolerance	Yes
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 Uses

The principle uses of Serfene 2060 are as an extrusion primer, a primer for subsequent overcoating; e.g., a Serfene or Daran® top coating grade product, and as a self-adhering jaw release coating. These constructions find use in areas such as the flexible packaging of meat, cheese, and snacks.

Formulation

Serfene 2060 must be formulated in order to exhibit jaw release properties. We suggest the following formula:

	Parts By Weight
Serfene 2060 at 50%	100
Serfene DL-96 Wax Emulsion at 25%	6
Silica Dispersion at 10%	2.5

The ingredients should be added as listed with adequate stirring. This formula gives a dried coating which contains 3 phr wax and 0.5 phr silica (solids/solids basis). The silica dispersion is prepared by using a silica such as Syloid 244 (Grace Davison) along with a wetting agent and then mixed at high shear just prior to adding to the Serfene 2060 formulation.

We recommend that this formulation be evaluated at 2.0 – 2.5 LB/ream. Optimum jaw release properties are developed only after allowing adequate time for blooming of the wax and for crystallization of the PVDC polymer. You should allow one week of ambient aging or overnight at 100°F in order to accomplish this.

Recommended Operating Conditions

Application Method	Wire wound metering rods (Mayer rod) or Direct reverse gravure
Application Solids	35 – 50%
Dilution	5 -30% IPA, at coater
Web Temperature	150 - 180°F, zoned oven
Coating Weight	1 LB/ream for priming applications
	2.0 – 2.5 LB/ream for barrier extrusion priming or jaw release coating
Cure Time	2 days for ca 85% cure
	14 days for maximum cure
Clean-up	Immediate-water
	Freshly dried – water, MEK, toluene
	Dried – THF, stripping solution

Comments

Actual coating weight will depend on the end use and ability to form a continuous film. PVDC is dense; note that 2 lb/ream of coating is equivalent to only 7.5 gauge.

In-line treatment is recommended for the primary web. Polyolefins should be treated above 40 dynes/cm.

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.