



# Covinax 169-00

## PRODUCT DESCRIPTION

**Covinax 169-00** is a polyvinyl alcohol stabilized vinyl acrylic copolymer emulsion developed for a variety of permanent pressure sensitive applications requiring very aggressive tack. It exhibits outstanding adhesion to most synthetic films, including treated and untreated polyethylene and polypropylene, tyvek and cryovac. It performs well in low temperatures and is widely used in packaging applications both formulated and as a straight polymer. Covinax 169-00 can be formulated into a wash-away adhesive by the addition of a nonionic surfactant. The polyvinyl alcohol colloid allows easy cleanup and imparts excellent machining. It can be applied with a knife, rod, roller coater or extruded in beads for various packaging applications. Covinax 169-00 is FDA compliant under 21CFR 175.105, 21CFR 176.180.

## PHYSICAL PROPERTIES

<b>Polymer Type:</b>	Vinyl acrylic	<b>Freeze/Thaw Stability:</b>	Unstable
<b>Protective System:</b>	Polyvinyl alcohol	<b>Weight Per Gallon:</b>	8.5
<b>Viscosity (cps):</b>	1600-3400 (LVF, Spindle #2/60 RPM/77° F)	<b>Color:</b>	White
<b>Percent Solids:</b>	58.0 – 60.00	<b>Shelf Life:</b>	3 months
<b>pH:</b>	4.50 – 5.50		
<b>Glass Transition Temperature (T<sub>g</sub>):(DSC):</b>	-42.8 °C		
	<b>(DMA):</b> -23.1 °C		

## PERFORMANCE PROPERTIES

A 1 mil (28g/M<sup>2</sup>) dry film of Covinax 169-00 cast directly onto 1 mil thickness polyester film will exhibit the following average performance properties when tested on #304 stainless steel, which has a #3 surface finish.

Test	Typical Values	Specification Range
180° Peel Adhesion <sup>1</sup> (lbs)	3.20	3.0 minimum
178° Shear Adhesion <sup>2</sup> (minutes)	27	5 minimum
Loop Tack <sup>3</sup> (lbs)	3.60	2.5 minimum

**FDA Compliance:** 21CFR 175.105  
21CFR 176.180

<sup>1</sup> Franklin International 03QC5002, 30 minute dwell.

<sup>2</sup> Franklin International 03QC5003, 0.25 square inch, 500 gram load, 10 minute dwell.

<sup>3</sup> Franklin International 03QC5004, 1 square inch contact, 1 second dwell.

**Covinax 169-00****AVERAGE APPLICATION PROPERTIES**

TEST/SUBSTRATE	Facestock: Paper				Facestock: BOPP Film			
	LDPE	HDPE	Vinyl	Corrugate	LDPE	HDPE	Vinyl	Corrugate
180° peel (lb/lineal inch width) 30 minute dwell	PT	PT	PT	PT	3.54C	3.65C	3.78C	PT
90° peel (lb/lineal inch width) 30 minute dwell	2.10A	2.36A	6.00T	1.54A	1.58A	1.66A	4.92A	1.44A
Loop Tack (lb)	2.91	4.32	6.46	3.14	1.55	3.55	4.65	1.50

	Facestock: Paper	Facestock: BOPP Film	Facestock: Mylar
178° Shear (500 g, 0.25 in <sup>2</sup> ) (minutes)	27C	34C	27C
SAFT Testing (min/temp °C)	39/62.3 °C	27.3/62.3 °C	31.3/66.3 °C
Substrate: Stainless Steel		Coat weight: 1.0 mil (+/-0.1 mil)	

C = Cohesive      A = Adhesive      PT = Paper Tear      FP = Fiber pick

**ADDITIONAL INFORMATION****Yellowing (Colorimeter "b" value)**

UV Exposure (1 week) Mylar		Heat Exposure (1 week @ 140° F) Paper	
Before	After	Before	After
4.64	7.02	2.60	4.35

The data provided in this Product Data Sheet represents typical physical and/or performance values for the product under a given set of testing conditions. The ranges or values are not specifications. Specifications are set based on statistical analysis of measurements made by the quality control laboratory on production material and will accurately reflect production capabilities. This data should be used as a guide for product selection only.

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