



## Covinax 169-04

**Covinax 169-04** is a polyvinyl alcohol stabilized vinyl acrylic copolymer emulsion developed for a variety of permanent pressure sensitive applications requiring very aggressive wet and dry 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. Covinax 169-04 is formulated to be a wash-away adhesive. The polyvinyl alcohol colloid allows easy cleanup and imparts excellent machining. It can be applied with a knife, rod, roll coater or extruded in beads for various packaging applications.



### PHYSICAL PROPERTIES

**Polymer Type:** Vinyl acrylic

**Protective System:** Polyvinyl alcohol

**Color:** White

**Viscosity (cps):** 4,000 - 6,000 (LVF, Spindle #4/60 RPM /77°F)

**Percent Solids:** 57.0% - 60.0%

**pH:** 4.5 - 5.5

**Weight Per Gallon:** 8.5

**Shelf Life:** 3 months @ 70 °F

**Freeze/Thaw Stability:** Unstable

**Glass Transition Temperature (T<sub>g</sub>):** -50 °C

### PERFORMANCE PROPERTIES

A 1 mil (28g/m<sup>2</sup>) dry film of Covinax 169-04 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)	3.1	No specification
178° Shear Adhesion <sup>2</sup> (minutes)	27	10 - 55
Loop Tack <sup>3</sup> (lbs)	3.1	No specification

**FDA Compliance:** 21 CFR 175.105

<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.



## 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	2.7A	3.1A	4.8C	0.75A	2.5C/A	1.0T	1.3T	0.50A
90° peel (lb/lineal inch width) 30 minute dwell	1.2A	1.3A	2.8A	0.51A	1.2T	1.1T	1.2T	0.41T/S
Loop Tack (lb)	2.1	2.7	2.8	1.4	2.6	2.5	3.1	1.2

	Facestock: Paper	Facestock: BOPP Film	Facestock: Mylar
178° Shear (500 g, 0.25 in <sup>2</sup> ) (minutes)	20C	13C	Not Tested
Substrate: Stainless Steel		Coat weight: 1.0 mil (+/-0.1 mil)	

C = Cohesive

A = Adhesive

S = Stain

T = Transfer

### IMPORTANT NOTICE TO CUSTOMER:

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