

Covinax 462-00 DEV

PRODUCT DESCRIPTION

Covinax 462-00 DEV is a styrene-acrylic copolymer for pressure sensitive applications requiring very high blush and water resistance. It is useful in clear film applications in which hazing or blushing of the adhesive-coated film is objectionable.

PHYSICAL PROPERTIES

Polymer Type:	Styrene-acrylic	Freeze/Thaw Stability:	Unstable
Protective System:	Anionic	Weight Per Gallon:	8.4
Viscosity (cps):	1500 – 2500 (RVF Spindle #3/20 RPM /77 °F)	Color:	White
Percent Solids:	45% - 50%	Shelf Life:	3 Months
pH:	5.8 – 6.8		
Glass Transition Temperature (Tg):	-28.4 °C		
(DSC):			
	(DMA): -3.6 °C		

PERFORMANCE PROPERTIES

A 1 mil (28g/M²) dry film of [Product name] 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	Target Range
180° Peel Adhesion ¹ (lbs)	2.50 lbs.	1.70 Min.
178° Shear Adhesion ² (minutes)	1,251 Min.	76 Min.
Loop Tack ³ (lbs)	2.10 lbs.	0.8 Min.

FDA Compliance: N/A

¹ Franklin International 03QC5002

² Franklin International 03QC5003

³ Franklin International 03QC5004

**Covinax 462-00 DEV****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	0.10A	0.29A	3.16A	0.15AL	0.31A	0.50AL	2.05A	0.79FP
90° peel (lb/lineal inch width) 30 minute dwell	0.14Z	0.30Z	1.33CF	0.08Z	0.28Z	0.54Z	2.36T	0.69FP
Loop Tack (lb)	0.30	0.49	1.67	0.20	0.39	0.89	0.84	0.09

	Facestock: Paper	Facestock: BOPP Film	Facestock: Mylar
178° Shear (500 g, 0.25 in ²) (minutes)	5,000+	912C	1,251C
SAFT Testing (min/temp °C)	127 Min./155° C	79 Min./107° C	26 Min./54° 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
4.86	8.57	2.95	3.92

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.

Important Notice to Purchaser: Our recommendations, if any, for use of this product are based on tests believed to be reliable. The greatest care is exercised in the selection of our materials and in our manufacturing operations. However, we make no recommendation to use this product in any manner which conflicts with existing laws and/or patents and WE MAKE NO WARRANTIES, EXPRESS OR IMPLIED, REGARDING THIS PRODUCT OR ITS USE, INCLUDING MERCHANTABILITY AND FITNESS FOR PARTICULAR PURPOSE, THE MANUFACTURER IS NOT LIABLE FOR ANY CONSEQUENTIAL, INCIDENTAL OR SPECIAL DAMAGES OF ANY KIND. Revised 06/19/09.

©Copyright 2009. All rights reserved. Franklin International.



Wood Adhesives
Pressure Sensitive Adhesives
Specialty Polymers

Technical Information Sheet 81507

Franklin Adhesives & Polymers

Determining Developmental Products' Target Ranges

This Technical Information Sheet reviews how specification ranges are created for new developmental adhesives and polymers (labeled as "DEV") from initial production through commercialization (removal from DEV status).

Franklin utilizes the Stage Gate Process for developing new polymers and adhesive formulations. Customer requirements are entered into the initial stage of the process. During the developmental process, lab and pilot samples are normally created and tested by Franklin technical personnel as well as by the customer for approval. These samples are experimental (EXP) batches and range in quantity from a quart to a 2250 lb. tote.

In order for the EXP product to move to Franklin production, three replicated lab and/or pilot batches are made. From these batches, target ranges are calculated using 3 Sigma limits and are incorporated into Franklin's QC and Production System, creating a DEV product.

Once eight consecutive production batches are made without changes to the formulation or process, the product specifications are set based on these batches, the product is no longer developmental and the DEV designation is removed.

In most cases, target ranges will change from initial production batches through the commercialization process. Often this results in a broadening of the specification ranges. The customer is notified of these changes.

DGP 8/15/07