Covinax 525-66 DEV

High Shear General Purpose Permanent

Covinax 525-66 DEV is a surfactant stabilized vinyl acrylic copolymer emulsion developed for high performance permanent pressure sensitive adhesive applications. It has an excellent balance of peel adhesion and shear adhesion. Covinax 525-66 DEV is internally cross linked, giving it superior cohesive strength. In addition, it has been tested on vinyl film used in digital graphics applications and exhibits good plasticizer migration resistance. It will resist cold flow and will die cut and convert well, giving dry edges to finished sheets and rolls.

PHYSICAL PROPERTIES

Polymer Type: *Vinyl Modified Acrylic Copolymer*
Protective System: *Anionic*
Color: *White*
Viscosity (cps): *800 - 1100 (RVF, Spindle #3/20 RPM /77° F)*
Percent Solids (%): *54.0 - 57.5*
pH: *4.8 - 5.8*
Weight Per Gallon: *8.7*
Borax Compatible: *Yes*
Glass Transition Temperature (Tg):(DSC): *-37.6°C*

PERFORMANCE PROPERTIES

A 1 mil (28g/m^2) dry film of Covinax 525-66 DEV 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[1] (lb)	*2.3*	*1.6 minimum*
178° Shear Adhesion[2] (minutes)	*940*	*330 minimum*
Loop Tack[3] (lb)	*1.8*	*1.0 minimum*
Minimum Application Temperature:	*>32°F*	*N/A*
Service (Use) Temperature:	*20°F to 250°F*	*N/A*

NOTE: Minimum application and service temperatures are dependent upon many factors including face stock, adhesive coat weight, adhesion, and intended application. We can only offer an estimate based on the Tg and typical performance properties of the adhesive.

[1]Franklin International 03QC5002, 30 minute dwell.
[2]Franklin International 03QC5003, 0.25 square inch, 500 gram load, 10 minute dwell.
[3]Franklin International 03QC5004, 1 square inch contact, 1 second dwell.

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STORAGE AND HANDLING

Shelf life: Best if used within three months of date of manufacture. Mix before use for best results. Product is not freeze/thaw stable.

For additional questions, Franklin's technical service team is available at 1.800.877.4583. **24/7** technical service is available online at www.franklinadhesivesandpolymers.com.

IMPORTANT NOTICE TO CUSTOMER:

The recommendations and data contained in this Product Data Sheet for use of this product are based on information Franklin believes to be reliable. They are offered in good faith without guarantee, as conditions and methods of use of our product by Customer are beyond Franklin's control. Customer must determine the suitability of the product for a particular application before adopting it on a commercial scale.

All orders for Franklin products shall be subject to Franklin International, Inc.'s Standard Terms and Conditions of Sale which may be found at http://www.franklini.com/Terms_and_Conditions.aspx ("Standard Terms"). Different or additional terms proposed by Customer are expressly rejected and shall not become part of the agreement between Customer and Franklin International, Inc. with respect to any order. Contact Franklin International, Inc. immediately if you cannot access our Standard Terms and we will provide you a copy upon request. Any sale of products by Franklin to Customer is expressly conditional upon Customer's consent to the Standard Terms, and Customer's acceptance of any performance by, or receipt of products from, Franklin International, Inc. shall constitute Customer's acceptance of the Standard Terms and Conditions of Sale.

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Franklin Adhesives & Polymers

Franklin Adhesives & Polymers

Wood Adhesives
Pressure Sensitive Adhesives
Specialty Polymers

Technical Information Sheet 81507

Pressure Sensitive Adhesives

Determining Developmental Products' Specification 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 labeled as experimental (EXP) batches. In order for the EXP product to move to Franklin production, at least three replicated lab and pilot batches are made. From these batches, target ranges are specified by the critical to quality parameters agreed upon by the Franklin International technical team and the customer. These values are incorporated into Franklin's QC and Production System, creating a DEV product.

At least eight consecutive production batches are made without changes to the polymer, formulation, or process. All eight batches must pass customer's evaluation and are determined to fit the desired application. The product specifications are set based on these batches with customer's agreement. At this stage, the product is no longer developmental, and the DEV designation is removed. The targeted specification may or may not change as per the statistical data from the production batches. These ranges are calculated using 3 Sigma limits at this stage and are incorporated into Franklin's QC and Production System.

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.

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