

Covinax 424-39 DEV

Covinax 424-39 DEV is our next generation coater-ready surfactant stabilized vinyl acrylic copolymer for general purpose permanent pressure sensitive adhesives in tape and label applications. This product is built using our proprietary polymerization process that produces very high performance properties. Covinax 424-39 DEV has a good balance of peel and tack, which allows it to be used in a wide variety of applications. It exhibits excellent adhesion to corrugate, polyolefin films, glass and metals. It displays excellent converting properties with its high cohesive strength. Covinax 424-39 DEV can be transfer coated on most rod, gravure or roll coaters. This product is APE-free, formaldehyde-free and meets FDA requirement 21CFR 175.105.



PHYSICAL PROPERTIES

Polymer Type: Vinyl Modified Acrylic Copolymer

Color: White

Protective System: Anionic Surfactant

Viscosity (cps): 100 - 400 cps (RVF, Spindle #2/100 RPM/77° F)

Percent Solids (%): 57.0 - 59.0

pH: 5.4 - 7.0

Weight Per Gallon: 8.7

Glass Transition Temperature (Tg): (DSC): -40.2°C

PERFORMANCE PROPERTIES

A 1 mil (28 g/m²) dry film of Covinax 424-39 DEV cast directly onto 1 mil thickness polyester film will exhibit the following average performance properties when tested on #304 stainless steel (#3 surface finish).

Test	Typical Values	Target Range
180° Peel Adhesion ¹	3.7 lb (1678 g)	>1.8 lb (816 g)
Loop Tack ³	3.4 lb (1542 g)	>1.8 lb (816 g)
178° Shear Adhesion ²	30 minutes	N/A
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.

FDA Compliance: 21CFR 175.105

¹Franklin International 03QC5002, 30-minute dwell.

²Franklin International 03QC5003, 0.25 square inch, 500-gram load, 10-minute dwell.

³Franklin International 03QC5004, 1 square inch contact, 1 second dwell

STORAGE AND HANDLING

Shelf life: Best if used within six 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.

© Copyright 2022. All rights reserved. Franklin International. Revised 06/15/2022.



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/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 at least 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 shift, and possibly a broadening, of the specification ranges. The customer is notified of these changes.

DGP 11/12/2018