

# PakSeal™ Coating

**An EPA-Approved and FDA-Compliant Solvent-based Coating**

**CardPak's PakSeal Coating** provides significant manufacturing and performance advantages:

- **Faster Dwell Times**

Blisters can be efficiently applied – in some cases at up to twice the speed of water-based coatings.

- **Greater Bond Strength**

**CardPak's PakSeal** consistently outperforms water-based coatings, averaging a 50% stronger bond with half the dwell time.

- **Consistent Sealing Performance**

**PakSeal** is the industry's most reliable coating, maintaining solid bond coverage around the entire flange of the blister.

- **Excellent for Recycled Blisters**

**PakSeal** is the most effective solvent coating for use with recycled blisters (RPET), as well as other forms of blister material such as PVC, styrene or PET (polyethylene).

- **Adaptable to All Sealing Equipment**

**PakSeal** coating can be used on both heat seal and RF sealing machines, providing the greatest sealing parameters on the widest range of equipment.

**Consistent Performance.  
Conclusive Results.**



*Retailer Friendly, Consumer Friendly, Earth Friendly!*



CardPak is ISO 14001:2004 certified for Environmental Management Systems.



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## Independent Study:

**CardPak** retained the services of Chemsultants, a national independent testing firm specializing in adhesive consulting and laboratory testing. They hold accreditation from the American Association for Laboratory Accreditation (No. 1629.01) and are members of the American Society for Testing and Materials (ASTM), the Society for Coating Technology and The Cleveland Society for Coatings Technology.

## Aqueous Coating vs. PakSeal Solvent-based Coating

The following is an overview of the testing parameters used for this comparative study.

PROCESS VARIABLES	
Each test studied 30+ different combinations of process variables:	
COATINGS - 3 Coating Products Were Tested: P - PakSeal, A1 - Aqueous, A2 - Aqueous, 2nd Sample	
SEALING** - Platen Temperatures For Both Coatings: L - Lower Temp- 350°F, H - Higher Temp- 375°F	
DWELL TIMES - Tested For Both Coatings: A - 0.8 sec., B - 1.0 sec., C - 1.3 sec., D - 1.6 sec., E - 2.0 sec.	
TEST CONDITIONS - Blister cards were tested at both 0°F and 73°F, with 50% relative humidity	
DROP TEST - Blister cards were dropped from a height of either 9 inches or 24 inches, and tested both empty and weighted	

\*\* Blisters were sealed on an Alloyd Model 2SC-1016 machine at an 80 PSI gage pressure.

### THE MACHINE TEAR TEST

Machine tear results clearly demonstrated that the bond on the **Aqueous coated cards** was lower with significantly greater process variation than the **PakSeal coated cards**. The tear force for the **PakSeal coated cards** was consistently above 30 pounds with an average standard deviation of approximately 2, while the tear force for the **Aqueous coated cards** varied from above 30 pounds to below 15 pounds, with an average standard deviation of approximately 6.

### THE HAND TEAR TEST

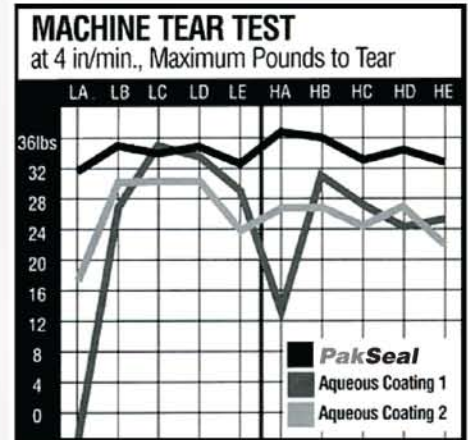
Hand tear results demonstrated that all **PakSeal coated cards, regardless of temperature or dwell time, displayed 100% paper tear every time**. However, bonding on the **Aqueous coated cards** needed a very narrow process window to come close to an equal performance. Bonds varied from 20 to 100%, depending on the platen temperatures and dwell times. There were **few Aqueous coated cards that displayed 100% bonding** around the entire flange of the blister.

### THE DROP TEST

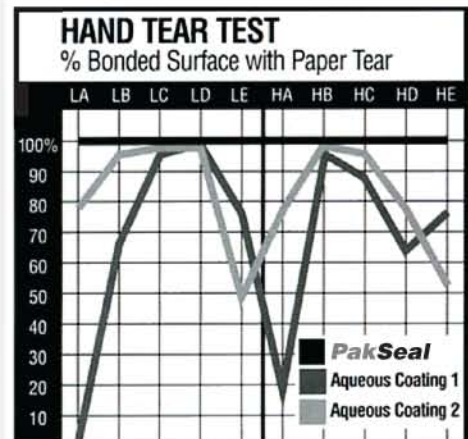
**Drop Test – Empty:** All the replicates of all the process variables at both test temperatures passed the drop test. This is not surprising since the blisters were empty. There was essentially no force on the heat seal bond upon impact.  
**Drop Test – Weighted:** Sample “A1” experienced failures at the lower dwell times at both sealing temperatures. All other samples of all card types passed all tests.

## Consistent Performance. Conclusive Results.

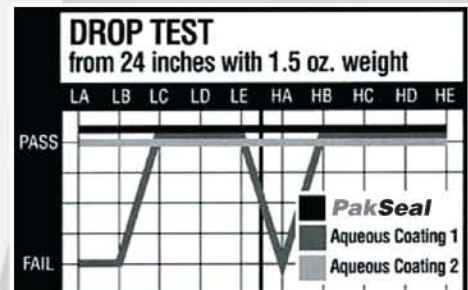
CardPak sales consultants are available to discuss individual PakSeal applications, as well as to assist you in developing EcoLogical Packaging products. Contact 1-800-824-3342 or [marketing@cardpak.com](mailto:marketing@cardpak.com)



300 samples were tear tested for tensile strength by machine. The maximum force encountered (lbs. per inch) was recorded and standard deviation was computed. The results shown in this chart were conducted in a 73°F environment.



300 samples were tear tested by hand and the percentage of successful tear area was recorded and standard deviation was computed. The results shown in this chart were conducted in a 73°F environment.



540 empty and weighted samples were drop tested to hit a flat surface perpendicular, from a height of 9" or 24". The percentages of successful bonds were recorded. The results shown in this chart were conducted in a 73°F environment.

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