

CPV-18

# Advanced Starch Glue Performance

Improved green tackiness, stronger bonding, and **higher machine speeds**.



STRONGER  
BONDING



HIGHER  
MACHINE  
SPEEDS



BETTER BOARD  
STRENGTH



SUSTAINABLE &  
ENVIRONMENTALLY  
FRIENDLY



DOR GROUP

Helping manufacturers achieve **stronger products** and more **sustainable** operations.

# CPV-18

## Blend of high molecular weight polymers

CPV-18 is being used by our customers in starch-based adhesives for corrugated cardboard due to its beneficiary properties that enhance the adhesive's performance.

 **Biodegradable and environmentally friendly**

 **Fully accepted for food contact** as listed under 21CFR§177.1670



### HOW CPV-18 CONTRIBUTES TO STARCH GLUE FORMULATION



#### IMPROVED BOND STRENGTH

Enhances the glue ability to penetrate and adhere to paper surfaces which improves the structural integrity of corrugated cardboard. Gives some mechanical properties like tensile strength and modulus.



#### FILM FORMATION

Helps in forming a flexible and continuous film when the glue dries. This is essential to maintain the bond between the flute and liner.



#### VISCOSITY CONTROL

Stabilizes the viscosity, ensuring consistent application during high-speed production. Reduces glue splattering and dripping.



#### ENHANCED TACKINESS

Contributes to achieve immediate bonding upon contact. This is essential in high-speed production.



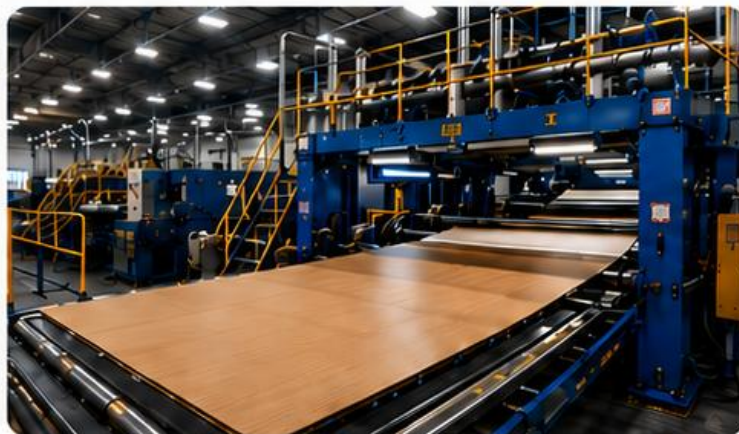
#### INCREASED MACHINE SPEED

As the results of all the above properties the machine speed increases by **10 to 20%**.



#### CPV-18 DOSAGE

- 1 Prepare your starch glue as per your formula
- 2 Add CPV-18 as your last additive
- 3 Dose CPV-18 1.2 to 1.4% of total liquid glue (for 1000 kg Glue add 12 to 14 kg CPV-18)
- 4 Mix with the high-shear agitator for 2 to 3 min
- 5 CPV-18 is highly compatible with starch, forming a uniform mixture when dispersed properly in glue kitchen.



#### CPV-18 SPECIFICATION

Appearance	Aqueous solution
pH	4.5 – 7.0
Viscosity (cP)	140 – 240
Solids (%)	17.0 – 19.0
Specific gravity (gr/ml)	1.04 – 1.05

# Case Studies

Type	Description	Speed without CPV-18 (m/min)	Speed with CPV18 (m/min)	Improvement %	Bonding	Region
Double Wall BC Flute	W120-F100-F100-F120-K135	150	170	13.33% ↑	Good	Middle East
Double Wall BC Flute	T115-F080-F080-F080-C-T115	154	183	18.83% ↑	Good	Middle East
Double Wall EB Flute	L160-S1150-K273-S1150-K273	140	170	21.43% ↑	Good	Middle East
Double Wall EB Flute	W173-S1125-F115-S1125-K170	156	180	15.38% ↑	Good	Middle East
Double Wall EB Flute	K-273-S135-K135-S135-K135	130	160	23.08% ↑	Good	Middle East
Double Wall EB Flute	W140-S135-K273-S135-K273	150	160	6.67% ↑	Good	Middle East
Single Wall C Flute	K275-SC150-K200	174	192	10.34% ↑	Good	Europe
Double Wall BC Flute	K200-SC140-SC140-SC140-W160	160	200	25.00% ↑	Good	Europe
Double Wall BC Flute	K275-SC150-SC150S-C140-W160	172	202	17.44% ↑	Good	Europe
Single Wall B Flute	W125-SC140-W125	151	200	32.45% ↑	Good	Europe
Single Wall C Flute	TL130-TL130-TL130	150	190	26.67% ↑	Good	Europe






# Business Impact of CPV-18

CPV-18 delivers measurable improvements across key performance areas, driving operational excellence and long-term value for our customers.

 <p><b>Stronger Bonds</b> Enhanced adhesion and board integrity</p>	 <p><b>Higher Productivity</b> Increased machine speed and output</p>	 <p><b>Better Quality</b> Consistent performance and fewer defects</p>	 <p><b>Sustainability</b> Lower emissions and reduced waste</p>	 <p><b>Cost Efficiency</b> Lower glue usage and operational savings</p>
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## KEY BUSINESS IMPACT

 <p><b>MACHINE SPEED INCREASE</b> <b>Higher</b> ↑ Higher throughput and productivity</p>	 <p><b>BOND STRENGTH IMPROVEMENT</b> <b>Stronger</b> ↑ Stronger bonds and better board quality</p>	 <p><b>REJECT RATE REDUCTION</b> <b>Notable</b> ↓ Fewer defects and improved first-pass yield</p>	 <p><b>GLUE CONSUMPTION REDUCTION</b> <b>Significant</b> ↓ Lower adhesive usage and material savings</p>	 <p><b>COST SAVINGS POTENTIAL</b> <b>Substantial</b> ↑ Reduced costs across materials and operations</p>
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## DRIVING VALUE ACROSS THE BUSINESS

 <p><b>OPERATIONS</b></p> <ul style="list-style-type: none"> <li>Higher line speed and output</li> <li>Improved equipment efficiency</li> <li>Fewer stops and interruptions</li> </ul>	 <p><b>QUALITY</b></p> <ul style="list-style-type: none"> <li>Stronger and more reliable bonds</li> <li>Reduced defects and rework</li> <li>Consistent product performance</li> </ul>	 <p><b>COSTS</b></p> <ul style="list-style-type: none"> <li>Lower glue consumption</li> <li>Reduced waste and rework</li> <li>Overall cost of ownership improvement</li> </ul>	 <p><b>SUSTAINABILITY</b></p> <ul style="list-style-type: none"> <li>Lower emissions</li> <li>Reduced waste</li> <li>More sustainable operations</li> </ul>	 <p><b>CUSTOMER VALUE</b></p> <ul style="list-style-type: none"> <li>Better product quality</li> <li>Reliable supply and performance</li> <li>Stronger customer satisfaction</li> </ul>
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