



Berset 2713

A New Crosslinker for Replacing Latex in Coated Board Applications

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System Overview:

Over 500 tpd of coated board mill
 All carbonate base coating with a blended carbonate/clay top coating
 Base Coating Solids: 67 to 68%
 Base Coating Latex Amount: 12 parts
 Base Coating Pigment: All Coarse Carbonate
 Base Coating Crosslinker: None
 Coater: On Machine Blade
 Coating Dryers: Infrared

Mill Objective and Testing Requirements:

Replace upwards of 25% of the latex (3 parts) with Berset 2713 providing significant cost savings to the mill. Coating strength properties with reduced latex and Berset 2713 will have to be at least equal to the all latex control as measured by Adams Wet Rub Resistance and IGT Wet and Dry Pick. Also, there should be no loss in paper properties such as gloss, and brightness.

Pre-Trial Lab Study:

Berset 2713 with 9 parts of latex was tested vs. base coating with 12 parts of latex and no crosslinker added.

	Control with 12 parts latex	1 part of Berset 2713 with 9 parts latex
Base BV	2400 cps	2000 cps
Base HHSV	51.0 cps	45.1 cps
Base Adams Wet Rub	26 ntu's	9 ntu's
Base IGT Wet Pick	1.40	1.38
Base IGT Dry Pick	39	37
Base Gloss	27.3	27.7
Top Coating (as-is) on Top of Base Coating		
Top Adams Wet Rub on Base	92	64
Top IGT Wet Pick on Base	1.22	1.46
Top IGT Dry Pick on Base	20	18
Print Gloss on Top on Base	88.0	87.9
Brightness on Top on Base	85.3	85.9

Conclusion:

The use of 1 part of Berset 2713 resulted in the lowering of the latex amount by 25% (or 3 parts). This lowered amount of latex along with using only 1.0 part of Berset 2713 added saved the mill upwards of \$350,000 per year (based on base coating is 10% of total production and latex cost of 50 cents per pound).