BianCoat B
CLEAR GLASS COATING

BIANCO JAPAN

Result of performance test of BianCoat B

***Applied coating : Biancoat Cure condition : Tested after more than 3 days at normal temperature.**

Test	Test method for paint	Result
Scratch resistance	Steel wool testing Condition:#0000, Weight 1kg x 100 reciprocating motions	Conformed
Shock resistance	Based on JIS K5600-5-3 Part 5. Mechanical property of film section 3 : Falling-weight test. Condition: DuPond method: weight 500g hight 30cm, t=0.6mm	No crack No peeling
Pencil hardness	Based on JIS K5600-5-4 Part 5. Mechanical property of film Section 4: Scratch hardness (pencil method) Condition: Uni of Mitsubishi pencil, 45°, weight 750g	Greater than 6H (Greater than 9H)
*K5600-5-4 test is based on ISO/DIS 15184, Paints and varnishes-Determination of film hardness by pencil test		
Adhension test	Based on JIS K5600-5-6 Part 5. Mechanical property of film Section 6: Adhension test (cross-cut test) Condition: 100 pieces of 1mm grid, scotch tape peeling test, numbers of adhensive grids / 100.	100 / 100 (Class 0)
*K5600-5-6 is based on ISO 2409, Paints and varnishes-Cross-cut test		
Flex resistance	Based on JIS K5600-5 Part 5. Mechanical property of film-Section 1: Bend test(Cylindrical mandrel) Condition: Bending testing machine (Type-1), 6mmφ, t=0.3mm	No crack No peeling
*K5600-5 is based on ISO 1519, Paints and varnishes-Bend test (cylindrical mandrel).		
Solvent resistance	Based on JIS K5600-6-1 Chemical property of film Section 1: Resistance to liquids (General method), Condition: Soaking method 10 minutes in 50 °C, Solvent: Acetone, methanol, toluene Evaluation: Evaluation by K5600-8 coating degradation, pencil hardness, adehension test.	No change Greater than 6(9)H 100 / 100
Acid resistance	Based on JIS K5600-6-1 Chemical property of film Section 1: Resistance to liquids (general method), Condition: Spot method, sulphuric acid aqueous solution for 24 hours	No changes
Alkali resistance	Based on JIS K5600-6-1 Chemical property of film Section 1: Resistance to liquids (general method), Condition: Absorbing slovent method, 5% of lime water for 24 hours	No changes
*JIS K5600-6-1 is based on ISO 2812-1, Paints and varnishes- Determination of resistance to liquids -Part 1: General method. *JIS K5600-8 is based on ISO 4628-2, Paints and varnishes- Evaluation of degradation of paint coating. and size of common types of defect -Part 2: Designation of degree of blistering		
Rubbing resistance	Rubbing test Condition: Weight 500g 10 reciprocation montions, solvent: acetone, methanol, toluene. Evaluation: Evaluation by K5600-8 coating degradation	No changes
Water resistance	Based on JIS K5600-6-2 Chemical property of film Section 2: Resistance to liquids (water immersion method), Condition: 1. Soaked in 50°C hot water for 10 days. 2. Soaked in 80 °C hot water for 2 hours. 3. Boild for 30 minutes. Evaluation: Evaluation by K5600-8 coating degradation, pencil hardness, adehension test.	No change Greater than 6(9)H 100 / 100
*K5600-6-2 is based on ISO 2812-2, Paints and varnishes -Detemination of resistance to liquids -Part 2: Water immersion method. *JIS K5600-8 is based on ISO 4628-2, Paints and varnishes- Evaluation of degradation of paint coating. Designation of intensity, quantity and size of common types of defect -Part 2: Designation of degree of blistering.		
Resistance to humidity	Based on JIS K5600-7-3 Long-period performance of film Section 3: Resistance to humidity (Intermittent condensation), Condition: 50°C x 98% of humidity x 240 hours.	No changes
*K5600-7-3 is based on ISO 11503, Paints and varnishes -Detemination of resistance to humidity(intemittent condensation)		
Heat resistance	Based on JIS K5600-6-3 Chemical property of film Section 3: The effect of heat Condition: 80°C x 200 hours. Evaluation: Evaluation by K5600 coating degradation, colorimetry.	No changes, △E= Less than 0.5
*K5600-6-3 is based on ISO 3248, Paints and varnishes -Detemination of the heat effect of heat		
Cold resistance	Condition: -18°C x 72 hours. Evaluation: Evaluation of K5600 coating degradation.	No changed
Temperature cycle test	Condition: 80°C x 2 hours => -18°C x 2 hours, 10 cycles. Evaluation: Evaluation by K5600 coating degradation.	No changed
Combustibility	Burn coating surface with gas burner (approx.1,000°C)	Not burned

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***Applied coating : Biancoat Cure condition : Tested after more than 3 days at normal temperature.**

Test	Test method for paint	Result
Stain resistance	Wipe up with solvent after being contacted with contaminant at 20°C temerature for 24 hours. Conditon permanent maker in black & red. Evaluation: Visual test	No changed
Salt water resistance	Based on JIS K5600 general rust preventive (iron plate, copper plate & magnesium plate). Condition: 3 kinds, soaked in sodium chloride solution for 96 hours	No changed
Accelerated weathering	EYE super UV tester. Condition: 100mW, 60°C, 70% RH, 200 hours Evaluation : K5600-8 coating degradation, K5600-4 colorimetry, gloss rentention.	No Changes, △E= Greater Than 0.5, Greater Than 95%
Surface electrical resistance	Based on JIS K6911 general testing method for thermosetting plastics. Condition: Normal state (C-96/20/65), Voltage DC500V, PC plate (Control 10^{17})	10^{12}
Coating thickness	Based on K5600-1-7 General rule Section 7: Determination of film thickness	Smaller than 4μm

*K5600-1-7 is based on ISO 2808, Paints and varnishes -Detemination of film thickness
*After applied, it is possible not to get harden more than 9H hardness, if it is wiped up before cured completely.
The above data is measured value of testing, therefore this does not guarantee perfomance of this product.

Test from standards and criteria for food and food additives, etc (notification No.370 of Ministry of health in 1958)

	Test case	Result
Materials testing	Lead	conformed
	Cadmium	conformed
Elution testing	Heavy metals (as lead)	conformed
	Consumption of potassium permanganate	conformed

Applied coating : Biancoat
D-2 Synthetic resin implements, containers and packing

Test of formaldehyde emission rate

Test	Testing method	Result
Emitted component analysis from film	●JIS K5601-4-1:2003 "Paint analysis method from Chapter 4: Emitted coponent analysis from film Section 1. Formaldehyde" ●Condition: No dilution. Applied 1time with brush Applied amount: 25g/m2	Avg.: 0.07mg/L

*Applied coating : Biancoat
*Less than 0.12mg/L of formaldehyde emission rate is satisfied F☆☆☆☆. by JIS
*Japn paint testing testing assosiation

Slipping test by applying Biancoat on floor.

	Dry condition	Wet condition
Normal floor	0.96	0.70
Biancoat applied	1.10	1.01

Testing method : JIS A5705, JIS A1454 (Tested by polymeric flooring material)
Based on 6.14 slippage test
*Coefficient of skin friction Japan testing center for construction materials