



Delta Intercontinental Pte Ltd

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Test Report No: PJI/2009/CR-07 dated 12th March 2009

SUBJECT:

Chemical Resistance Test on Delta Starlite 115 QS

TESTED FOR:

PJI Contract Pte Ltd
29 Woodlands Industrial Park E2
Nordix
Singapore 757461

SAMPLE DESCRIPTION:

The test samples were prepared by PJI Contract Pte Ltd.

Sample/Substrate	Area of application	Quantity
Delta Starlite 115 QS 200mm x 200mm x 9mm cement board	200mm x 200mm	10 pcs

TEST METHODS:

Chemical Resistance

Adopted ASTM D 1308 : 2001 Standard Test Method For Effect of Household Chemicals on Clear and Pigmented Organic Finishes.

Substrate : 200 mm x 200 mm x 9 mm cement board
Reagent/Chemical : Acetic Acid (10%, 25%, 40%, 99%)
Brine (Saturated sodium chloride)
Calcium Chloride (50%)
Calcium Hydroxide (Saturated)
Citric Acid (20%, 60%)
Detergent (Alkaline)
Formic Acid (40%, 70%, 90%, 99%)
Gasoline
Hydrochloric Acid (10%, 37%)
2-propanol (99%)
Jet Fuel
Kerosene
Methanol (99%)
Methylene Chloride (99%)



Methyl Ethyl Ketone (99%)
 Motor Oil
 Nitric Acid (5%, 30%, 70%)
 Phosphoric Acid (5%, 40%, 50%, 85%)
 Potassium Hydroxide (50%)
 Sodium Chloride (Saturated)
 Sodium Hydroxide (20%, 32%, 50%)
 Sodium Hypochlorite (15%)
 Sulfuric Acid (5%, 30%, 50%, 98%)
 THF
 Toluene (99%)
 Distilled Water
 White Spirit
 Xylene (99%)

Test Condition : Open spot 6 hours
 No. of determination : 1 per reagent and concentration

CONDITIONING:

Unless otherwise specified, all test specimens were conditioned at $23 \pm 2^{\circ}\text{C}$, $70 \pm 15\%$ relative humidity and tested at $23 \pm 2^{\circ}\text{C}$, $65 \pm 5\%$ relative humidity.

Chemical Resistance Test Results:

Test	Delta Starlite 115 QS
Acetic Acid (10%)	Faint mark (Discoloration)
Acetic Acid (25%)	Faint mark (Discoloration)
Acetic Acid (40%)	Faint mark (Discoloration)
Acetic Acid (99%)	Faint mark (Discoloration)
Brine (Saturated sodium chloride)	No effect
Calcium Chloride (50%)	No effect
Calcium Hydroxide (Saturated)	No effect
Citric Acid (20%)	No effect
Citric Acid (60%)	No effect
Detergent (Alkaline)	No effect
Formic Acid (40%)	Severe mark (Blistering)
Formic Acid (70%)	Severe mark (Blistering)
Formic Acid (90%)	Severe mark (Blistering)
Formic Acid (99%)	Severe mark (Blistering)
Gasoline	No effect
Hydrochloric Acid (10%)	No effect
Hydrochloric Acid (37%)	No effect



2-propanol (99%)	No effect
Jet Fuel	No effect
Kerosene	No effect
Methanol (99%)	No effect
Methylene Chloride (99%)	No effect
Methyl Ethyl Ketone (99%)	No effect
Motor Oil	No effect
Nitric Acid (5%)	No effect
Nitric Acid (30%)	Very faint mark (Stain)
Nitric Acid (65%)	Faint mark (Stain)
Phosphoric Acid (5%)	No effect
Phosphoric Acid (40%)	No effect
Phosphoric Acid (50%)	No effect
Phosphoric Acid (85%)	No effect
Potassium Hydroxide (50%)	No effect
Sodium Chloride (Saturated)	No effect
Sodium Hydroxide (20%)	No effect
Sodium Hydroxide (32%)	No effect
Sodium Hydroxide (50%)	No effect
Sodium Hypochlorite (15%)	No effect
Sulfuric Acid (5%)	No effect
Sulfuric Acid (30%)	No effect
Sulfuric Acid (50%)	No effect
Sulfuric Acid (98%)	Faint mark (Stain)
THF (99%)	No effect
Toluene (99%)	No effect
Distilled Water	No effect
White Spirit	No effect
Xylene (99%)	No effect

REMARKS:

1. Test age : 7 day cure in air minimum prior to test.
2. Sample provided by PJI Contract Pte Ltd
3. Reagent provided by PJI contract Pte Ltd

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