

CLIENT: TOP FLIGHT SUPPLIES

> 7839 S. Peoria St. Eaglewood CO 80112

United States

Attn: Scott Huppert

> Test Report No: 4377738PP01R1 Date: 20 September 2019

This report supersedes previous report dated on 26 October 2018 for error on company name

SAMPLE(S) SUBMITTED

BY THE CLIENT AS: Ceramic Coating Protection, Color: Clear.

DATE OF RECEIPT: 11 October 2018

TESTING PERIOD: 19 - 26 October 2018

TEST REQUESTED: The submitted samples were tested for Pencil Hardness as per ASTM

> D 3363, Alkali & Acid test as per 5% (Sodium Carbonate & Hydrochloric Acid) Solution, and Salt Spray test as per 3% Sodium

Chloride Solution.

TEST RESULTS: See pages 2 to 3

PREPARED BY: SIGNED FOR AND ON BEHALF OF

SGS NORTH AMERICA INC.,

Feal Laun

Hayford Mensah, Report Writer **Packaging & Materials Lab**

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RESULTS:

Test: <u>Pencil Hardness Testing</u>

ASTM D 3363

Material: Cera	Ceramic Coating Protection, Color: Clear.		
Sample	Scratch Hardness	Gouge Hardness	
1	2B	HB	

Note: 2B was the highest pencil that will not rupture or scratch sample. HB was the highest pencil that will leave sample uncut.

Scale of hardness testing.

$$\frac{6B-5B-4B-3B-2B-B-HB-F-H-2H-3H-4H-5H-6H}{\text{Softer}}$$

Material:	Ceramic Coating Protection, Color: Clear.		
Test	Solution Used	Time/	Results/ Observation
Performed		Duration	
Alkali	5% Sodium	24hrs	No observable corrosion to ceramic
	Carbonate (Na ₂ CO ₃₎		coated metal but minor tarnishing to non-
			coated metallic side of panel
Acid	5% Hydrochloric	24hrs	No observable corrosion to ceramic
	Acid (HCI) ₁		coated metal but major wearing to non-
			coated metallic side of panel
Salt	3% Sodium Chloride	96hrs	No observable corrosion to ceramic
	(NaCI)		coated metal but minor corrosion to non-
			coated metallic side of panel

Note: Two samples for each test condition were submerged in solution for specified time, then inspected for abnormalities.

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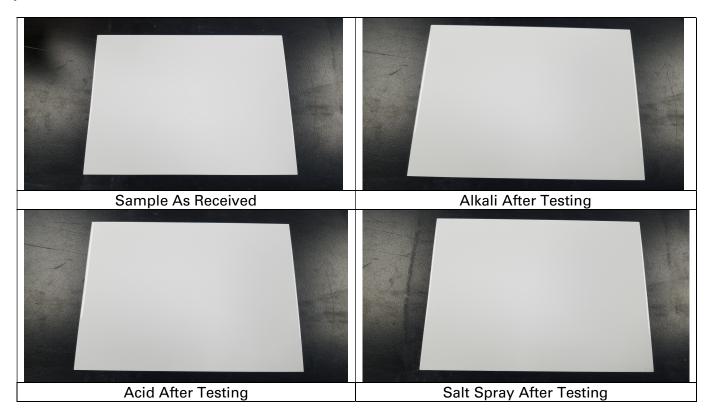
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RESULTS:

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Sample Photos



End of Report

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