



Corrosion Resistance Performance of Supplied Parts Exposed Acetic Acid Salt Spray Conditions

TSR 100588
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 Customer SOUTHERN POWDER COATERS
 Aim To evaluate the corrosion resistance performance of the supplied parts in Acetic Acid Salt Spray for 1000 hours or until failure.
 Method Refer to AS3715: 2002
 AS 2331.3.2 – 2001 Method 3.2: Corrosion and related property tests – Acetic Acid Salt Spray test (AASS)

Component/s **2 x Primrose and 2 x Beige aluminium extrusion pieces**

Part Number		Solvent Resistance / Cure	Adhesion	Film Build Range: 50-120 µm Recommended: 80 µm
100588/1	Primrose	Slight mark only = Pass	Rating 0 = Pass	Front: 62 – 79 microns Back: 30 – 59 microns (Fail) *
100588/2		Slight mark only = Pass	Rating 0 = Pass	Front: 65 – 85 microns Back: 36 – 45 microns (Fail) *
100588/3	Beige	Slight mark only = Pass	Rating 0 = Pass	Front: 49 – 59 microns Back: 24 – 45 microns (Fail) *
100588/4		Slight mark only = Pass	Rating 0 = Pass	Front: 49 – 61 microns Back: 27 – 35 microns (Fail) *

* WE ONLY WANT FOR THEM TO TEST THE FRONT OF THE SAMPLE!

Pre-treatment Chrome Chromate

Powder Unknown

Results **Refer to tables below**

100588/1

Test	Description	Specification	Result	Pass/Fail
Corrosion Resistance 1051 hrs Acetic Acid Salt Spray	Adhesion	Classification 1 max.	0	Pass
	Blistering – general area	Size (S) 2, Density (D) 2 max.	0	Pass
	Blistering – scribed area	Size (S) 2, Density (D) 2 max.	0	Pass
	Corrosion – general area	No visible corrosion	No visible corrosion	Pass
	Corrosion - filiform Mean Creep from scribe	Note severity & distance from scribe &/or panel edge Mean Creep - 2 mm max.	No filiform corrosion 0	Pass

100588/2

Test	Description	Specification	Result	Pass/Fail
Corrosion Resistance 1051 hrs Acetic Acid Salt Spray	Adhesion	Classification 1 max.	0	Pass
	Blistering – general area	Size (S) 2, Density (D) 2 max.	0	Pass
	Blistering – scribed area	Size (S) 2, Density (D) 2 max.	0	Pass
	Corrosion – general area	No visible corrosion	No visible corrosion	Pass
	Corrosion - filiform Mean Creep from scribe	Note severity & distance from scribe &/or panel edge Mean Creep - 2 mm max.	Minor filiform corrosion Average 1mm 0	Pass

100588/3

Test	Description	Specification	Result	Pass/Fail
Corrosion Resistance 1051 hrs Acetic Acid Salt Spray	Adhesion	Classification 1 max.	0	Pass
	Blistering – general area	Size (S) 2, Density (D) 2 max.	0	Pass
	Blistering – scribed area	Size (S) 2, Density (D) 2 max.	0	Pass
	Corrosion – general area	No visible corrosion	No visible corrosion	Pass
	Corrosion - filiform Mean Creep from scribe	Note severity & distance from scribe &/or panel edge Mean Creep - 2 mm max.	No filiform corrosion 0	Pass

100588/4

Test	Description	Specification	Result	Pass/Fail
Corrosion Resistance 1051 hrs Acetic Acid Salt Spray	Adhesion	Classification 1 max.	0	Pass
	Blistering – general area	Size (S) 2, Density (D) 2 max.	0	Pass
	Blistering – scribed area	Size (S) 2, Density (D) 2 max.	0	Pass
	Corrosion – general area	No visible corrosion	No visible corrosion	Pass
	Corrosion - filiform Mean Creep from scribe	Note severity & distance from scribe &/or panel edge Mean Creep - 2 mm max.	No filiform corrosion 0	Pass

Conclusion:

The test results show that all parts passed initial adhesion and solvent resistance/cure testing. The film builds on the front of the parts were within specified recommended levels, but the back film builds were quite low. The part tested all passed to Standard AS 2331.3.2 for Acetic Acid Salt Spray after 1051 hours exposure due to blistering.

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