

“Eck” Corrosion Inhibitor ASTM B117 testing

May 15, 2007

Objective:

Test ASTM B117 salt spray corrosion resistance of “Eck” corrosion inhibitor used on fasteners for aluminum joining.

Procedure:

Prepare 12 samples each per chart below. “Eck” corrosion inhibitor to be applied to the threads of the fasteners as well as the underside of the washer. Specimen ID may be preserved with corrosion resistant coating to ensure future readability. Assemble fasteners with washer and wipe excess “Eck” corrosion inhibitor.

SAMPLE ID	HARDWARE	"ECK" TYPE
WD1-6061-01	ZINC	SPRAY
WD1-6061-02	ZINC	PASTE
WD1-6061-03	ZINC	SPRAY
WD1-6061-04	ZINC	PASTE
WD1-6061-05	ZINC	SPRAY
WD1-6061-06	ZINC	PASTE
WD1-6061-07	STAINLESS	SPRAY
WD1-6061-08	STAINLESS	PASTE
WD1-6061-09	STAINLESS	SPRAY
WD1-6061-10	STAINLESS	PASTE
WD1-6061-11	STAINLESS	SPRAY
WD1-6061-12	STAINLESS	PASTE
WD1-2195-01	ZINC	SPRAY
WD1-2195-02	ZINC	PASTE
WD1-2195-03	ZINC	SPRAY
WD1-2195-04	ZINC	PASTE
WD1-2195-05	ZINC	SPRAY
WD1-2195-06	ZINC	PASTE
WD1-2195-07	STAINLESS	SPRAY
WD1-2195-08	STAINLESS	PASTE
WD1-2195-09	STAINLESS	SPRAY
WD1-2195-10	STAINLESS	PASTE
WD1-2195-11	STAINLESS	SPRAY
WD1-2195-12	STAINLESS	PASTE

Photograph all specimens prior to start of test. Record mass of each specimen prior to start of test. Perform ASTM B117 Salt Spray testing for 1000 Hr duration. Specimen shall be oriented such that the exposed threads at the bottom of the holes are exposed to salt spray. Photograph specimens at 500hrs. At conclusion of 1000 hr test, photograph and record mass of each specimen. Additionally, note any pertinent observations with respect to level of corrosion protection provided by the “Eck” corrosion inhibitor.

Conclusion:

Provide photographs and mass gain / loss along with any data / certifications required by ASTM B117.

PRODUCT ANALYSIS REPORT

Technology: Organic Finishing	Project Description: CVR – “ECK” Corrosion Testing	01653.01.WD001
Requested By: R. Japlucci	Demonstration Plan ID/Work Order No.: WO-296-07	Report Date: 9/13/07

Lab Sample ID	Customer Sample Description/ID	Test Parameter	Test Result	Test Method	Date/Initials Lab Analyst/Scientist
07-2704-P	WD1-2195-01	Change in Mass	0.2626 g mass gain / 0.30% change	N / A	8/14/07 / TH
07-2705-P	WD1-2195-02	Change in Mass	0.2283 g mass gain / 0.26% change	N / A	8/14/07 / TH
07-2706-P	WD1-2195-03	Change in Mass	0.3104 g mass gain / 0.36% change	N / A	8/14/07 / TH
07-2707-P	WD1-2195-04	Change in Mass	0.2520 g mass gain / 0.29% change	N / A	8/14/07 / TH
07-2708-P	WD1-2195-05	Change in Mass	0.2877 g mass gain / 0.32% change	N / A	8/14/07 / TH
07-2709-P	WD1-2195-06	Change in Mass	0.2955 g mass gain / 0.34% change	N / A	8/14/07 / TH
07-2710-P	WD1-2195-07	Change in Mass	0.2799 g mass gain / 0.32% change	N / A	8/14/07 / TH
07-2711-P	WD1-2195-08	Change in Mass	0.2783 g mass gain / 0.32% change	N / A	8/14/07 / TH
07-2712-P	WD1-2195-09	Change in Mass	0.3687 g mass gain / 0.42% change	N / A	8/14/07 / TH
07-2713-P	WD1-2195-10	Change in Mass	0.2788 g mass gain / 0.32% change	N / A	8/14/07 / TH
07-2714-P	WD1-2195-11	Change in Mass	0.3064 g mass gain / 0.35% change	N / A	8/14/07 / TH
07-2715-P	WD1-2195-12	Change in Mass	0.2503 g mass gain / 0.28% change	N / A	8/14/07 / TH
07-2716-P	WD1-6061-01	Change in Mass	0.1800 g mass gain / 0.21% change	N / A	8/14/07 / TH
07-2717-P	WD1-6061-02	Change in Mass	0.1122 g mass gain / 0.13% change	N / A	8/14/07 / TH

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Lab Sample ID	Customer Sample Description/ID	Test Parameter	Test Result	Test Method	Date/Initials Lab Analyst/Scientist
07-2718-P	WD1-6061-03	Change in Mass	0.1794 g mass gain / 0.21% change	N / A	8/14/07 / TH
07-2719-P	WD1-6061-04	Change in Mass	0.1501 g mass gain / 0.17% change	N / A	8/14/07 / TH
07-2720-P	WD1-6061-05	Change in Mass	0.2066 g mass gain / 0.24 % change	N / A	8/14/07 / TH
07-2721-P	WD1-6061-06	Change in Mass	0.1534 g mass gain / 0.17% change	N / A	8/14/07 / TH
07-2722-P	WD1-6061-07	Change in Mass	0.0915 g mass gain / 0.10% change	N / A	8/14/07 / TH
07-2723-P	WD1-6061-08	Change in Mass	0.0799 g mass gain / 0.09% change	N / A	8/14/07 / TH
07-2724-P	WD1-6061-09	Change in Mass	0.1120 g mass gain / 0.13% change	N / A	8/14/07 / TH
07-2725-P	WD1-6061-10	Change in Mass	0.0608 g mass gain / 0.07% change	N / A	8/14/07 / TH
07-2726-P	WD1-6061-11	Change in Mass	0.0975 g mass gain / 0.11% change	N / A	8/14/07 / TH
07-2727-P	WD1-6061-12	Change in Mass	0.0509 g mass gain / 0.06% change	N / A	8/14/07 / TH

Reviewed By: Lynn Summerson	Date: 9/17/07
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Notes:
