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Aluminum Rich Epoxy Primer for Ground and Air Vehicles

Monthly Technical Report for the Period: January 20, 2017 – February 24, 2017

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Project Objective: To further develop the Aluminum Rich Epoxy Primer systems for Air and Ground Vehicles while addressing the objective requirements outlined within the BAA.

Development Work: This past month has been spent evaluating different thixotrope systems for the Aluminum Rich Epoxy Primers in order to afford a lower initial viscosity allowing for better application properties; lower VOC; and the incorporation of various additives to enhance the corrosion resistance and allow for the removal of the magnesium from the 23377 type primer.

Results are very encouraging and new very stable systems have been developed that show minimal to no settling at viscosities of up to one half of those obtained with previous versions.

These reductions in viscosity have resulted in the addition of various anti-corrosive additives in addition to the aluminum powder with minimal impact on viscosity and further reductions in VOC.

Optimization of the level of thixotrope to obtain a stable lower VOC product will continue in the coming months.

Testing of panels for Salt Spray resistance and Cyclic Corrosion of the various anticorrosive additives will start during the next month as well.