Subject: Replacement of Mapsil 213 by of Mapsil 213B for PCB conformal coating application

Following the ESA Alert EA-2014-EEE-7-A some companies may want to replace the Mapsil 213 by the Mapsil 213B as conformal coating.

Change from Mapsil 213 to the Mapsil 213B is considered as a change in the PID and therefore impact the status of the ESA Approved Summary Tables.

As a minimum the company shall demonstrate the following:
- To demonstrate that the conformal coating thickness is the same
- To demonstrate that the application of the conformal coating results to the same end configuration (e.g. Some have as criteria the absence of conformal coating in between leads, some wants the conformal coating to flow under the devices...)
- To demonstrate that the adhesion of the conformal coating is as good as with the Mapsil 213,

It is recommended to have the tests performed on a Printed Circuit Board in order to ensure reproducibility toward flight hardware.

Once this will be verified the company shall create a new procurement specification (with attached the datasheet of the Mapsil 213B), a new preparation process and if needed an update of the application process.

The PID will need to be updated in order to integrate the replacement of the conformal coating and the updated processes.

The test report shall be provided to ESA (C. Villette) for the company that are seeking the ESA review of the results in order to have the PID updated.

Sincerely Yours,

Carole Villette
Materials Technology Section