MICRO VCM TEST REQUEST AND DATA SHEET PER ASTM E-595-93

(Requestor please read, then furnish all information above asterisks.)

 Requested by: MaryJane Stephenson
 Phone: 301-286-2321
 Date: 04/08/08

 Material Identification (product name, number, description, classification, etc.)
 Date: 04/08/08

 Douglas 29885/1481 Epoxy
 Date: 04/08/08

Manufacturer of Material (Name, City and State Address): Douglas Electrical

Material application (general usage, i.e. adhesive, coating, potting, etc.): Adhesive J. O. Number/Project Name: GOES-R ABI Request Infra-Red Spectra? YES NO Originator Source/Code (other than Code 541): Douglas Electrical

Indicate processing required by GSFC Materials personnel. Include the recipe, cure(s), and special instructions to be performed.

Test As Received

If material is to be tested in the "as received" condition, without further processing required, indicate in full the past history, recipe, cure(s), post cure(s), nomenclature of components, etc.

Mix Ratio: 100:2.85-3.15 Cure: 45 min @150F, Air

CVCM test specimen preparation and description: Cut up & placed in boats

Bar Position-CVCM Test Number	30778 (7)	30779 (8)	30780 (9)
Initial mass, holder and specimen, gm	0.240459	0.296715	0.240540
Mass of holder, gm	0.033116	0.031533	0.032276
Initial specimen mass @ <u>50 </u> %RH, gm	0.207343	0.265182	0.208264
Final mass, holder & specimen, gm	0.239945	0.296141	0.240029
Total mass loss, specimen, gm	0.000514	0.000574	0.000511
Percent TML, specimen	0.25%	0.22%	0.25%
Average value TML	****	0.24%	****
Mass after <u>50</u> %RH re-soak, 23 C, 24hr, gm	0.240185	0.296423	0.240300
Total mass, water vapor regain, gm	0.000240	0.000282	0.000271
Percent water vapor regain	0.12%	0.11%	0.13%
Average value WVR @ <u>50</u> %RH	****	0.12%	****
Initial mass, collector, gm	1.726884	1.731939	1.735441
Final mass, collector, gm	1.726895	1.731949	1.735455
Collected mass – CVCM, gm	0.000011	0.000010	0.000014
Percent CVCM	0.01%	0.00%	0.01%
Average Value CVCM	*****	0.01%	****

Remarks: CVCM (unweighable) on separator plate to_____ mm diameter. CVCM appearance as follows: _____ is not detectable on collector plates. thin; heavy; bluish color; transparent; _____ colored liquid;

opaque; matte; interference fringes; foggy; distorts eye reflection; smooth; smoky; splotchy; partially opaque; clear liquid; liquid runs in excess; Deposit covers **20** % of collector disc.

Specimen appearance after test:

Test completed: 4/30/08

No Visible Change

Test started 4/29/08

Specimen Temp. <u>124.8</u> °C Collector Temp. <u>24.8</u> °C

Period **24** Hrs.

Pressure 1.4X10⁻⁵ Torr

Analyst Dewey Dove and Debbie Thomas

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