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To: Joe Ware

From: D. S. Cox
Date: 23 October 1986

Interoffice
Communication

Subject: MEASUREMENT OF VARIATION ON LOW RVCM RESIN

VISTA

An experiment was set up to determine the variation in the RVCM analysis when very low samples were tested. This information is needed as customers are requesting our resin to have low RVCM values.

A 5305 resin sample was taken from a regular drier sample and weighed into HS-100 sample vials. One set of 40 had 2 grams of resin and the other set contained 4 grams of resin, all had 50 microliters of water added as specified in the EPA method. These samples were run at the normal conditions of 90 degrees cook temperature and 60 minutes cook time.

No significant difference would be seen due to sample size. For all samples, the maximum was 127 ppb (0.127 ppm) and the minimum was 54 ppb (0.054 ppm). The average value was 86 ppb (0.086 ppm) with a standard deviation of 13. The relative error was 15%, only one sample was greater than the 3 sigma control limits. The precision is considered good for this level of RVCM.

The run data is shown below and a plot of the data is attached.

PPB RVCM DATA FOR 2 GRAM SAMPLE

76	71	70	75	82	78	78
101	69	75	121	68	83	94
64	92	99	80	84	68	65
113	77	72	103	98	88	94
78	111	94	103	102	106	118
93	119	115	100	83		

PPB RVCM DATA FOR 4 GRAM SAMPLE

86	77	76	90	74	92	76
87	96	121	122	77	64	67
65	75	79	80	77	54	68
70	83	86	81	74	92	85
92	83	97	75	64	69	67
85	81	82	94	127		

David S. Cox

CC JF DH JRW

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DRY RESIN ANALYSIS BY HS-100

RUNS CHART, ONE RESIN

