

BUSINESS CONFIDENTIAL

Preliminary Information -
Subject to later verification
or revision

INFORMAL REPORT

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VINYL RESINS GENERAL, METAL CONTENT OF SELECTED RESINS

Samples of suspension poly(vinyl chloride) resins from Pechiney-St. Gobain (Lucovyl GB-1210) and of the Leavyn fiber [reportedly made from crystalline poly(vinyl chloride)] both contain an unexpectedly high percentage of iron, aluminum, silicon and magnesium compared to the QYTQ-7 resin. The Pechiney-St. Gobain resin was found to be unsuitable in an earlier critical wire evaluation at Bound Brook. The samples evaluated include the following:

(a) QYTQ-1, Blend 193, a UCC PVC homopolymer produced in production autoclaves at Texas City by the suspension process.

(b) Lucovyl GB-1210, a PVC homopolymer produced by Pechiney-St. Gobain of France by a new bulk process.

(c) Leavyn fiber, produced in Italy reportedly from PVC homopolymer; sample was obtained from American Viscose.

Mr. H. J. Pazinski of the Bound Brook Laboratory has reported the Pechiney-St. Gobain resin to be unsuitable for critical electrical applications due to the low volume resistivity (letter dated April 7, 1966). The unfavorable electrical properties may be due in part to the high content of iron, aluminum, silicon and magnesium present in the resin. The metals analyses were obtained using emission spectroscopy at the South Charleston Plant Laboratory.

The high tin content of the Leavyn fiber may be due to the presence of a stabilizer used in fiber manufacture.

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Attachment: Table I

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TABLE I
METAL ANALYSIS, PPM

	<u>QYTQ-7</u> <u>Blend-193</u>	<u>Pechiney-St. Gobain</u> <u>GB-1210</u>	<u>Leavyn</u> <u>Fiber</u>
Iron	2	30	10
Chromium	2	<1	<1
Nickle	<1	3	<1
Aluminum	2	27	Too strong * to read
Copper	<1	<1	5
Tin	<1	<1	20
Lead	<1	<1	<1
Silicon	1	Too strong * to read	Too strong * to read
Magnesium	<1	Too strong * to read	Too strong * to read

Samples were analyzed for metals content using emission spectroscopy at the South Charleston Plant Laboratory.

* Estimated at >100 ppm. _____

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