INTEROFFICE MEMORANDUM

Date: 11-Sep-1987 12:00pm
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TO: Gerald C. Culling
TO: Glenn R. Evers
TO: Edward J. Greenwood
TO: Thomas W. Del Pesco

CC: William D. Hill

Subject: ZEPELS FOR PAPER USE

THE RESULTS FOR THE EXTRACTIONS ARE SHOWN BELOW:

GENERAL:
1. EXTRACTIONS WERE DONE WITH WATER AT 150 F FOR 2 HRS--THIS IS SPECIFIED AS CONDITIONS FOR HOT FILLED OR PASTEURIZED FOODS IN THE CFR.
2. LOADINGS ARE ALL AT .12 POUNDS OF ZONYL RP EQUIVALENT PER MSF
3. ALL NUMBERS ARE STANDARDIZED TO AN EXTRACTION RATIO OF 10 ML PER SQ IN. THIS IS IN LINE WITH HOW DATA WAS HANDLED FOR RP IN THE 1960'S.

RESULTS

PRODUCT

<table>
<thead>
<tr>
<th>PPM PRODUCT (EXPRESSED AS RP)</th>
<th>EXTRACTED AT A RATIO OF 10 ML/SQ IN</th>
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</thead>
<tbody>
<tr>
<td>1. FX-810</td>
<td>.01</td>
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<tr>
<td>2. ZEPEL 6700</td>
<td>.09</td>
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<tr>
<td>3. ZEPEL 7040</td>
<td>.09</td>
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<tr>
<td>4. ZONYL RP</td>
<td>.62</td>
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THESE INITIAL RESULTS ARE ENCOURAGING SINCE THE POLYMERS APPEAR TO HAVE MUCH LESS EXTRACTABILITY THAN RP, WITH FX-810 THE BEST. THE RESULT FOR FX-810 INDICATES THAT 3M MAY NOT HAVE NEEDED TO GO THROUGH EXTENSIVE TESTING FOR QUALIFICATION OF THE PRODUCT.