Coloring Paper Pulp
using PRO MX Reactive Dyes
Please read directions carefully before starting.

Our PRO MX Reactive Dyes are water soluble, give good even saturation and have moderate light fastness on handmade paper. Always test before production runs for adhesion, coverage, and other specific requirements.

Supplies
PRO MX Reactive Dye
Retayne

Procedure
1. Hydrate pulp in hot water that is above 125°F (52°C). For information on hydrating pulp contact your local papermaking supplier or local library for books on papermaking.

2. Per pound (454 gm) of dry pulp:

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<th></th>
<th>Pale</th>
<th>Medium</th>
<th>Dark</th>
<th>Black</th>
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<tbody>
<tr>
<td>PRO MX Dye Powder</td>
<td>1 tsp (2.5 gm)</td>
<td>2 tsp (5 gm)</td>
<td>3 tsp (7.5 gm)</td>
<td>4 tsp (10 gm)</td>
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Coloring hydrated pulp with a mixer:
3. Dissolve the dye in one quart (1 liter) of hot water and pour it into the pulp slurry while the mixer is running.
4. Let pulp beat for 10 to 15 minutes.
5. Let pulp stand for 1 to 2 hours and test for bleed. If bleeding does not occur coloration is complete.
6. If there is bleeding, add 1 Tbl (15 ml) of PRO Retayne, for each pound of dry pulp, diluted in one cup (250 ml) of hot water, while the mixer is running.
7. Let pulp stand for an additional 1 to 2 hours. For darker colors it is advantageous to let stand overnight for maximum absorption.
8. Strain the colored pulp and rinse by pouring several gallons (liters) of water through it.

Coloring hydrated pulp manually:
3. Put hydrated pulp into plastic barrel or garbage can with HOT water.
4. Dissolve the dye in one quart (1 liter) hot water and pour into pulp slurry while stirring.
5. Stir pulp occasionally for 15-20 minutes.
6. Let pulp stand for 1-2 hours and test for bleed. If bleeding does not occur coloration is complete.
7. If there is bleeding, add 1 Tbl (15 ml) of PRO Retayne, for each pound of dry pulp, diluted in one cup (250 ml) of hot water, while stirring the pulp.
8. Let pulp stand for an additional 1 to 2 hours. For darker colors it is advantageous to let stand overnight for maximum absorption.
9. Strain the colored pulp and rinse by pouring several gallons (liters) of water through it.
Good things to know

1. As a general rule, use as little PRO Retayne as possible to yield desired results. Begin by adding 1 Tbl (15 ml) per pound (454 gm) of dry pulp.

   Retention agents can have an adverse effect on light fastness of some of the dyes and are recommended only when necessary.

2. When coloring pulp in a kitchen blender mix in short bursts. Prolonged blending has an adverse effect on dye absorption.

3. It is necessary to experiment with each color to find the appropriate combination of dye and Retayne to color different types of paper pulp.

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