

## Coloring Paper Pulp using PROfab Color Concentrates

Please Read Directions Carefully Before Starting

*Our PRO Color Concentrates are an excellent choice for coloring pulp. They are water soluble and have excellent light fastness on handmade paper. Always test before production runs for adhesion, coverage, wash fastness and other specific requirements. For additional information visit our website at [www.prochemicalanddye.com](http://www.prochemicalanddye.com).*

- ✘ ***Wear rubber gloves, apron or old clothes.***
- ✘ ***Utensils used for dyeing should never be used for food preparation.***

### Supplies

PROfab Color Concentrates  
 PRO Retayne

***Stir color concentrates well, before using.***

### Procedure

**1. Hydrate pulp** in hot water that is above 125F (52°C).

Note: For information on hydrating pulp contact your local papermaking supplier or local library for books on papermaking.

**2. Use equal amounts of PRO Retayne (Retention Agent) and PROfab Color Concentrate.** The desired depth of shade will determine the amounts PRO Retayne (Retention Agent) and PROfab Color Concentrate to use.

Per pound (454 gm) of dry pulp:

Pale	Medium	Dark
1 tsp (5 gm)	6 tsp (30 gm)	12 tsp (60gm)

### When coloring hydrated pulp with mixer:

- ✓ PRO Retayne is added to one quart (1 liter) of water, and poured into the pulp slurry while mixer is running.
- ✓ Pulp is left to beat for 10-15 minutes.
- ✓ Dilute the PROfab Color Concentrate with one quart (1 liter) of water.
- ✓ Pour the diluted Color Concentrate into the pulp slurry, while mixer is running.
- ✓ Beat for another 10 minutes. If there is no bleed, then coloration is complete.
- ✓ If bleeding occurs, let stand 1-2 hours and test for bleed again. See Hint #1.
- ✓ For dark colors, it is advantageous to let stand overnight for maximum absorption.
- ✓ Strain colored pulp and rinse by pouring several gallons (liters) of water through it.

### **When coloring hydrated pulp manually:**

- ✓ Put hydrated pulp into plastic barrel or garbage can with room temperature water.
- ✓ Add the PRO Retayne to one quart (1 liter) of water.
- ✓ While stirring, with a long stick or broom handle, add diluted PRO Retayne and stir vigorously.
- ✓ Let stand 15 to 20 minutes with occasional stirring.
- ✓ Dilute the PROfab Color Concentrate in one quart (1 liter) of water, and then add the diluted PROfab Color Concentrate to the pulp and stir again.
- ✓ Let stand 1 to 2 hours or overnight as needed for maximum color absorption. Additions of Retayne may be necessary (See Hint #1)
- ✓ After coloration is complete, strain and rinse colored pulp as directed above.

### **HINTS**

1. Additional quantities of PRO Retayne may be necessary after the Color Concentrate has been added. As a rule, use as little PRO Retayne as possible to yield desired results. Begin by adding 1 Tbl (15 gm) per pound (454 gm) of dry pulp.
2. When coloring pulp in a kitchen blender, mix in short bursts. Prolonged blending can have adverse effects on absorption of dye.
3. It is necessary to experiment with each color to find the appropriate combination to color different types of paper pulp.