



# Skin Tones Color Formula Guide

**Rit**


Ben Nye® All formulas were developed in partnership with Ben Nye Makeup.

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## Tips for Dyeing

### Dye Type

 Use **Rit All-Purpose Dye** if you are working with cotton (can have up to 10% spandex).

 Use **Rit DyeMore Synthetic Fiber Dye** if you are working with nylon.

### Color

The colors shown in this guide are based on the following standards:

- **Rit All-Purpose Dye:** White 100% cotton dyed at 140° F for 30 minutes
- **Rit DyeMore Synthetic Fiber Dye:** White 100% nylon dyed at 200° F for 30 minutes

The final color of your project may be lighter or darker depending on the fabric content, temperature and time in dyebath.

### Dye Method



- Use the sink/bucket method if you are working with **Rit All-Purpose Dye**.
- Use the stovetop method if you are working with **Rit DyeMore Synthetic Fiber Dye**.

### Powder or Liquid Dye



All of our formulas are listed with liquid dye measurements. If you are using powder dye, refer to our conversion chart on page 3.

### Amount of Dye and Water

All of our formulas are based on dyeing using three gallons of water. Our guidance on how to scale our formulas is on page 4.

### Test Color

We strongly recommend testing the color of your dyebath before dyeing.

- If you are using **Rit All-Purpose Dye**, the most realistic test would be to use a scrap piece of fabric from the garment you are dyeing. However, you can also test color by dipping a paper towel into the dyebath.
- If you are using **Rit DyeMore Synthetic Fiber Dye**, we recommend first heating up the dyebath on your stove to almost boiling. The most realistic test would be to use a scrap piece of nylon from the garment you are dyeing and leave it in the dyebath for 5 minutes. If a scrap piece of fabric isn't available, then use a fabric swatch that has a similar fiber makeup as the garment (if available). Unfortunately, using a paper towel to test color will not give you a close representation of how the color will appear on the nylon. It is worth a try if you do not have a swatch available, but please keep in mind that it won't provide you with an exact match for color.

If the color is too light, add more dye; if the color is too dark, add more water. If more dye is needed, add dye in increments of 1/4 to 1 teaspoon, depending upon the recipe or amount of fabric being dyed. If the color is too dark, add hot water in 1 to 2 cup increments, depending upon the size of the dyebath and the amount of fabric being dyed.

### Enhance Color and Reduce Bleeding

If you are dyeing cotton with **Rit All-Purpose Dye**, we strongly recommend using **Rit ColorStay Dye Fixative** immediately after dyeing to reduce bleeding and enhance the color of your dye project. **Rit ColorStay Dye Fixative** does not work on nylon.



# Powder to Liquid Conversion

All of our formulas are listed with liquid dye measurements. If you are using powder dye, use this conversion chart to convert the liquid measurements in our formulas to powder ones.

Liquid



- 4 Bottles
- 3 Bottles
- 2 Bottles
- 1 Bottle
- 1/2 cup
- 6 tablespoons
- 1/4 cup (4 tablespoons)
- 2 tablespoon (6 teaspoons)
- 5 teaspoons
- 4 teaspoons
- 1 Tablespoon (3 teaspoons)
- 2 teaspoons
- 1 teaspoon
- 1/2 teaspoon
- 1/4 teaspoon
- 1/8 teaspoon
- 1/16 teaspoon
- 1/32 teaspoon
- 1/64 teaspoon

Powder



- 8 packages
- 6 packages
- 4 packages
- 2 packages
- 1 package
- 1 1/2 Tablespoons
- 1 Tablespoons
- 1 1/2 teaspoons
- 1 1/4 teaspoon
- 1 teaspoon
- 3/4 teaspoon
- 1/2 teaspoon
- 1/4 teaspoon
- 1/8 teaspoon
- 1/16 teaspoon
- 1/32 teaspoon
- 1/64 teaspoon
- 1/128 teaspoon
- 1/256 teaspoon





# Scaling a Formula

## Choose Your Dyebath

Use the below chart to determine which dyebath size you need for your project.

### Small:

1 Leotard

### Medium:


2-3 Leotards  
1 Outfit


### Large:

4-6 Leotards  
2-3 Outfits

## Conversion Charts

The formulas on this guide are for a 3 gallon dyebath. Use this chart to scale a formula up or down.

<div>General Conversions</div>		
Amount of Water in Dyebath		
4 Cups or Quart	3 Gallons	6 Gallons
8 t	2 bottles	4 bottles
4 t	1 bottle	2 bottles
2 t	1/2 cup	1 bottle
1 t	1/4 cup	1/2 cup
1/2 t	2 T	1/4 cup
1/4 t	1 T	2 T
1/8 t	1 1/2 t	1 T
1/16 t	3/4 t	1 1/2 t
1/32 t	1/2 t	3/4 t
1/64 t	1/4 t	1/4 t
t = teaspoon    T = Tablespoon		

<div>For Fractions Less Than 1/4 Teaspoon</div>	
Make a solution containing 2 cups hot water with 1 teaspoons dye. From that solution add the amount on the right to the dyebath. Sometimes converting a recipe can result in small fractions. Follow the chart below when needing to measure an amount below 1/4 teaspoon.	
Measurement Needed	Solutions Amount
1/8 t	1/4 Cup
1/16 t	2 Tablespoons
1/32 t	1 Tablespoon
1/64 t	1 1/2 teaspoons
1/128 t	3/4 teaspoon
1/256 t	1/2 teaspoon
1/512 t	1/4 teaspoon

## Cotton Formulas



**Special White (IS-1)**  
1-1/2 tsp Camel



**Ciné Light Beige (CE-3)**  
1 tbs Camel



**Cameo (BE-1)**  
1 tbs Camel  
1 tbs Rose Quartz  
3/4 tsp Tangerine



**Natural Beige (BE-3)**  
2 tbs Rose Quartz  
1 tbs Camel



**Warm Sand (BE-5)**  
2 tbs Rose Quartz  
1 tbs Camel  
3/4 tsp Tangerine



**Ciné Beige (CE-5)**  
2 tbs Camel  
3/4 tsp Cocoa Brown



**Olive Beige 1 (OB-1)**  
2 tbs Rose Quartz  
1 tbs Camel  
1-1/2 tsp Tangerine



**Olive Beige 2 (OB-2)**  
2 tbs Camel  
1 tbs Tangerine  
1 tbs Rose Quartz



**Beige Natural 1 (BN-1)**  
1/4 Cup Rose Quartz  
2 tbs Camel



**Beige Natural 2 (BN-2)**  
1/4 Cup Rose Quartz  
3 tbs Camel



**Beige Natural 3 (BN-3)**  
1/4 Cup Camel  
1 tbs Cocoa Brown



**Olive Beige 3 (OB-3)**  
3 tbs Camel  
1 tbs Tangerine  
1-1/2 tsp Rose Quartz



**Almond (MH-02)**  
1 tbs Camel  
3/4 tsp Cocoa Brown



**Biscotte (NO-3)**  
1/4 Cup Camel  
1/4 Cup Rose Quartz



**Brulée (NO-5)**  
2 tbs Camel  
1-1/2 tsp Tangerine



**Soft Caramel (NO-7)**  
2 tbs Camel  
1-1/2 tsp Tangerine



**Tan Brulée (NO-9)**  
10 tbs Camel  
1 tbs Cocoa Brown



**Olive Tan (IS-18)**  
3 tbs Camel  
1 tbs Tangerine  
1 tbs Rose Quartz



**Shinsei Fair (SH-2)**  
1 tbs Camel  
1-1/2 tsp Tangerine



**Shinsei Medium (SH-3)**  
1 tbs Camel  
3/4 tsp Tangerine



**Shinsei Deep (SH-4)**  
2 tbs Camel  
3/4 tsp Tangerine



**Au Lait (SA-1)**  
1/2 Cup Camel  
3/4 tsp Tangerine



**Golden Latté (SA-2)**  
1 Cup Camel  
1 tbs Cocoa Brown



**Latté (SA-3)**  
3/4 Cup Camel  
1-1/2 tsp Tangerine



**Golden Spice (MH-08)**  
6 tbs Camel  
1 tbs Cocoa Brown



**Coco Sorbet (MH-10)**  
1 Cup Camel  
2 tbs Cocoa Brown



**Mocha (SA-5)**  
3/4 Cup Camel  
2 tbs Cocoa Brown



**Espresso (SA-11)**  
1/2 Cup Dark Brown  
2 tbs Cocoa Brown



**Coco Soufflé (MH-18)**  
1 Cup Dark Brown  
1/4 Cup Cocoa Brown



**Espresso Bean (MH-20)**  
1-1/2 Cups Dark Brown  
6 tbs Cocoa Brown



## Nylon Formulas



**Special White (IS-1)**  
1 tbs Sandstone



**Ciné Light Beige (CE-3)**  
1 tbs Sandstone  
1/4 tsp Apricot



**Cameo (BE-1)**  
3 tbs Sandstone  
1/4 tsp Apricot



**Natural Beige (BE-3)**  
2 tbs Sandstone  
1/4 tsp Apricot



**Warm Sand (BE-5)**  
2 tbs Sandstone  
1/2 tsp Apricot  
1/8 tsp Chocolate



**Ciné Beige (CE-5)**  
3 tbs Sandstone  
1/8 tsp Chocolate



**Olive Beige 1 (OB-1)**  
1/4 Cup Sandstone  
1/4 tsp Apricot



**Olive Beige 2 (OB 2)**  
5 tbs Sandstone  
1/4 tsp Apricot



**Beige Natural 1 (BN-1)**  
1 tbs Sandstone  
1/4 tsp Apricot  
1/4 tsp Chocolate



**Beige Natural 2 (BN-2)**  
1-1/2 tsp Sandstone  
3/4 tsp apricot  
3/4 tsp Chocolate



**Beige Natural 3 (BN-3)**  
1 tbs Sandstone  
3/4 tsp Apricot  
1/4 tsp Chocolate



**Olive Beige 3 (OB-3)**  
2 tbs Sandstone  
1/4 tsp Apricot  
1/4 tsp Chocolate



**Almond (MH-02)**  
2 tbs Sandstone  
1/2 tsp Apricot



**Biscotte (NO-3)**  
2 tbs Sandstone  
1/8 tsp Apricot  
1/8 tsp Chocolate



**Brulée (NO-5)**  
1/4 Cup Sandstone



**Soft Caramel (NO-7)**  
3 tbs Sandstone  
1/2 tsp Apricot  
1/4 tsp Chocolate



**Tan Brulée (NO-9)**  
1/4 Cup Sandstone  
1/2 tsp Apricot  
1/4 tsp Chocolate



**Olive Tan (IS-18)**  
2 tbs Sandstone  
1/4 tsp Apricot  
1/8 tsp Chocolate



**Shinsei Fair (SH-2)**  
2 tbs Sandstone



**Shinsei Medium (SH-3)**  
3 bs Sandstone



**Shinsei Deep (SH-4)**  
6 tbs Sandstone



**Au Lait (SA-1)**  
1/4 Cup Sandstone  
1/2 tsp Apricot  
1/2 tsp Chocolate



**Golden Latté (SA-2)**  
3 tbs Sandstone  
1/2 tsp Apricot  
1/2 tsp Chocolate



**Latté (SA-3)**  
2 tbs Sandstone  
3/4 tsp Apricot  
3/4 tsp Chocolate



**Golden Spice (MH-08)**  
3 tbs Sandstone  
3/4 tsp Chocolate  
1/2 tsp Apricot



**Coco Sorbet (MH-10)**  
1/4 Cup Sandstone  
1-1/2 tsp Chocolate  
1/2 tsp Apricot



**Mocha (SA-5)**  
3 tbs Sandstone  
3/4 tsp Apricot  
1/2 tsp Chocolate



**Espresso (SA-11)**  
1/4 Cup Sandstone  
1-1/2 tsp Chocolate  
3/4 tsp Apricot



**Coco Soufflé (MH-18)**  
5 tbs Chocolate  
5 tbs Sandstone



**Espresso Bean (MH-20)**  
1/2 Cup Sandstone  
1/4 Cup Chocolate

Ben Nye® All formulas were developed in partnership with Ben Nye Makeup. The corresponding Ben Nye color and reference code is listed below each shade. Rit formulas were matched to actual Ben Nye MatteHD Foundations. Actual product color may vary from the web swatch (or digital color reference).



Ben Nye is a professional makeup brand serving artists, education and makeup fans worldwide. The company was founded by legendary Hollywood makeup artist, Ben Nye, Sr., in 1967, who used his extensive knowledge to create quality color cosmetics to serve the professional artist community.

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