

# PROCION MX COLOR FORMULA GUIDE

There are 11 standard Procion MX colors (see Procion MX technical information). All other colors, no matter the manufacturer, are mixed using formulas of these 11. We offer this extended palette for your convenience, and many of our colors are used in these recipes.

If you wish to use the primary colors and black exclusively in your mixes, please see our Procion MX Color Wheel Mixing Chart: <https://www.jacquardproducts.com/s/Procion-MX-Color-Wheel-Mixing-Chart.pdf>.

## GENERAL DYEING RECOMMENDATIONS:

- The color formulas presented here are very reliable, but temperature, type of fabric, amount of salt used, fiber type, soda ash used and dyeing method (batching or immersion) can affect the final color.
- The batch dye method was used for color swatches because it yields the deepest and brightest results.
- Running dye tests with these recipes is recommended, before large dye runs.

## Using the Parts Method:

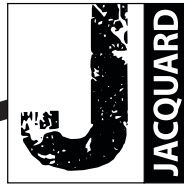
1. Determine the total amount of dye needed for your fiber and divide by the total number of parts to get 1 part.
2. Multiply the 1 part by the number of parts for each color to get the amount you need for that specific color.
3. Repeat with other colors.

NOTE: Measuring small amounts of dye can be made easier with a stock solution. Add one teaspoon (tsp) of dye to ½ cup of water. Use the chart below to get the stock solution equivalent in partial cups, teaspoons and tablespoons.

Dry Dye Powder	Equivalent Stock Solution Volumes (1 tsp in ½ cup)
1 tsp dry dye powder	= ½ cup / 24 tsp / 8 tbsp
½ tsp dry dye powder	= ¼ cup / 12 tsp / 4 tbsp
¼ tsp dry dye powder	= ⅛ cup / 6 tsp / 2 tbsp
⅛ tsp dry dye powder	= 3 tsp / 1 tbsp
1/16 tsp dry dye powder	= 1½ tsp / ½ tbsp

## TIPS:

- 1% dye by weight of fabric is a light color.
- 4% by weight of fabric is a dark color.
- 1 lb = 453 grams
- 1 tsp ~ 3 grams
- 6 tsp ~ 4% dye for 1 lb
- 3 tsp ~ 2% dye for 1 lb
- Batching (as in tie dye) gives full color development.
- When immersion dyeing, use 3x more Salt than Soda Ash to get the deepest shade of dye.



‡ = "Cracking Colors" (colors that separate in a tie dye from the ones that "look" pure).

Swatch:	Color Formula:	Parts Method:	Procion Colors:	Tsp Method:
	Daffodil	9 parts 1 part	Lemon Yellow #004 Golden Yellow #010	2 ¼ tsp ¼ tsp
	Goldenrod	16 parts 1 part	Lemon Yellow #004 Brilliant Orange #020	4 tsp ¼ tsp
	Wheat ‡	18 parts 1 part	Golden Yellow #010 Warm Black #128	2 ¼ tsp ⅛ tsp
	Pea Green	9 parts 1 part	Golden Yellow #010 Medium Blue #072	2 ¼ tsp ¼ tsp
	Apricot	9 parts 1 part	Golden Yellow #010 Brilliant Orange #020	2 ¼ tsp ¼ tsp
	Harvest Orange	18 parts 9 parts 1 part	Golden Yellow #010 Brilliant Orange #020 Warm Black #128	2 ¼ tsp 1 ⅛ tsp ⅛ tsp
	Red Brick	9 parts 9 parts 1 part	Golden Yellow #010 Fire Engine Red #030 Warm Black #128	2 ¼ tsp 2 ¼ tsp ¼ tsp
	Tangerine ‡	11 parts 6 parts	Golden Yellow #010 Fire Engine Red #030	2 ¾ tsp 1 ½ tsp
	Red Orange	11 parts 6 parts	Golden Yellow #010 Carmine Red #032	2 ¾ tsp 1 ½ tsp
	Rose Hip	9 parts tone with	Fire Engine Red #030 Warm Black #128	2 ¼ tsp 1/16 tsp
	Antique Rose	9 parts 1 part	Fire Engine Red #030 Warm Black #128	2 ¼ tsp ¼ tsp
	Rose	11 parts 6 parts	Carmine Red #032 Golden Yellow #010	2 ¾ tsp 1 ½ tsp
	Burnt Orange	18 parts 1 part	Brilliant Orange #020 Warm Black #128	2 ¼ tsp ⅛ tsp.
	Berry Red	2 parts 1 part	Carmine Red #032 Golden Yellow #010	4 ½ tsp 2 ¼ tsp
	Dark Pink	9 parts 1 part	Magenta #034 Medium Blue #072	2 ¼ tsp ¼ tsp
	Berry Sorbet ‡	6 parts 3 parts 1 part	Fuchsia #040 Turquoise #068 Warm Black #128	1 ½ tsp ¾ tsp ¼ tsp
	Orchid ‡	1 part 1 part	Fuchsia #040 Turquoise #068	2 ¼ tsp 2 ¼ tsp
	Plum	2 parts 1 part	Fuchsia #040 Medium Blue #072	3 tsp 1 ½ tsp



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Swatch:	Color Formula:	Parts Method:	Procion Colors:	Tsp Method:
	Lavender	9 parts 4 parts	Medium Blue #072 Fire Engine Red #030	2¼ tsp 1 tsp
	Amethyst ‡	1 part 1 part	Magenta #034 Cerulean Blue #070	2¼ tsp 2¼ tsp
	Maroon ‡	3 parts 1 part	Carmine Red #032 Navy #078	3 tsp 1 tsp
	Purple Violet ‡	1 part 1 part	Fuchsia #040 Cerulean Blue #070	4 tsp 4 tsp
	Red Violet ‡	1 part 1 part 1 part	Navy #078 Fuchsia #040 Cobalt Blue #076	2¼ tsp 2¼ tsp 2¼ tsp
	Pansy Purple ‡	1 part 1 part	Fuchsia #040 Navy #078	2½ tsp 2½ tsp
	Blue Violet ‡	9 parts 4 parts 4 parts	Navy #078 Fuchsia #040 Cobalt Blue #076	2¼ tsp 1 tsp 1 tsp
	Navy (Red Shade) ‡	1 part 1 part	Brown Rose #126 Navy #078	2½ tsp 2½ tsp
	Blue Slate	2 parts 1 part	Medium Blue #072 Warm Black #128	3 tsp 1½ tsp
	Dark Cobalt ‡	2 parts 1 part	Navy #078 Warm Black #128	1½ tsp ¾ tsp
	Chambray Blue	12 parts 1 part	Cobalt Blue #076 Warm Black #128	1½ tsp ⅛ tsp
	Storm Blue	9 parts 1 part	Medium Blue #072 Warm Black #128	2¼ tsp ¼ tsp
	Mountain Blue	9 parts 1 part	Cerulean Blue #070 Warm Black #128	2¼ tsp ¼ tsp
	Indigo	1 part 1 part	Medium Blue #072 Navy #078	1½ tsp 1½ tsp
	Postal Blue	1 part 1 part	Cobalt Blue #076 Navy #078	2¼ tsp 2¼ tsp
	Prussian Blue	1 part 1 part	Cerulean Blue #070 Navy #078	5 tsp 5 tsp
	Dark Periwinkle ‡	9 parts 5 parts 2 parts	Navy #078 Cobalt Blue #076 Fuchsia #040	2⅛ tsp 1⅛ tsp ½ tsp
	Dusty Blue ‡	9 parts 1 part	Turquoise #068 Brilliant Orange #020	2¼ tsp ¼ tsp



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Swatch:	Color Formula:	Parts Method:	Procion Colors:	Tsp Method:
	Seafoam Blue ‡	4 parts 1 part	Cerulean Blue #070 Rust Orange #016	1 tsp ¼ tsp
	Blue Mist ‡	9 parts 1 part	Turquoise #068 Rust Orange #016	2¼ tsp ¼ tsp
	Malachite ‡	5 parts 1 part 1 part	Turquoise #068 Lemon Yellow #004 Warm Black #128	2½ tsp ½ tsp ½ tsp
	Blue Spruce	1 part 1 part	Lemon Yellow #004 Cobalt Blue #076	2¼ tsp 2¼ tsp
	Spruce	1 part 1 part	Navy #078 Lemon Yellow #004	2¼ tsp 2¼ tsp
	Grass Green	9 parts 5 parts 5 parts	Lemon Yellow #004 Cerulean Blue #070 Medium Blue #072	4½ tsp 2¼ tsp 2¼ tsp
	Yellow Green	18 parts 1 part	Lemon Yellow #004 Medium Blue #072	2¼ tsp ⅛ tsp
	Chartreuse	18 parts 1 part	Lemon Yellow #004 Turquoise #068	2¼ tsp ⅛ tsp
	Vermillion Green ‡	1 part 1 part	Turquoise #068 Golden Yellow #010	2¼ tsp 2¼ tsp
	Lime Green	22 parts 9 parts	Lemon Yellow #004 Turquoise #068	2¾ tsp 1⅛ tsp
	Spring Green ‡	13 parts 10 parts 3 parts	Lemon Yellow #004 Turquoise #068 Medium Blue #072	6½ tsp 5 tsp 1½ tsp
	Shamrock ‡	20 parts 20 parts 9 parts	Lemon Yellow #004 Turquoise #068 Medium Blue #072	5 tsp 5 tsp 2¼ tsp
	Fern Green	11 parts 6 parts	Lemon Yellow #004 Cobalt Blue #076	2¾ tsp 1½ tsp
	Sage ‡	1 part 1 part	Rust Orange #016 Cerulean Blue #070	1½ tsp 1½ tsp
	Warm Grey ‡	1 part 1 part	Rust Orange #016 Cerulean Blue #070	4 tsp 4 tsp
	Cool Grey ‡	3 parts 2 parts	Cerulean Blue #070 Rust Orange #016	3 tsp 2 tsp
	Avocado Skin	2 parts 1 part	Lemon Yellow #004 Navy #078	3 tsp 1½ tsp



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Swatch:	Color Formula:	Parts Method:	Procion Colors:	Tsp Method:
	Artichoke ‡	2 parts 1 part	Turquoise #068 Rust Orange #016	2 tsp. 1 tsp
	Khaki ‡	1 part 1 part	Turquoise #068 Rust Orange #016	2¼ tsp 2¼ tsp
	Fatigue Green ‡	1 part 1 part 1 part	Cobalt Blue #076 Rust Orange #016 Lemon Yellow #004	1 tsp 1 tsp 1 tsp
	Tungsten ‡	1 part 1 part	Rust Orange #016 Medium Blue #072	1½ tsp 1½ tsp
	Raw Umber ‡	1 part 1 part	Rust Orange #016 Medium Blue #072	4 tsp 4 tsp
	Raw Sienna ‡	2 parts 1 part 1 part	Lemon Yellow #004 Medium Blue #072 Brilliant Orange #020	3 tsp 1½ tsp 1½ tsp
	Pottery	28 parts 9 parts	Rust Orange #016 Brown Rose #126	3½ tsp 1⅛ tsp
	Terra Cotta	28 parts 9 parts	Rust Orange #016 Burgundy #124	3½ tsp 1⅛ tsp
	Light Terra Cotta	1 part 1 part	Rust Orange #016 Burgundy #124	½ tsp ½ tsp
	Burnt Umber	1 part 1 part 1 part	Brown Rose #126 Warm Black #128 Brilliant Orange #020	2¼ tsp 2¼ tsp 2¼ tsp
	Red Clay	1 part 1 part	Burgundy #124 Fire Engine Red #030	2¼ tsp 2¼ tsp
	Cerise	2 parts 1 part	Carmine Red #032 Medium Blue #072	3 tsp 1½ tsp