

Reconstruction Exchange: Case Study in 16th Century Red Dyes

DYE AND MORDANT RECIPES

Adapted from Jo Kirby et al, *Natural Colorants for Dyeing and Lake Pigments: Practical Recipes and their Historical Sources* (Archetype, London, 2014)

Each recipe has been normalized to 1g of textile so that each ingredient of the mordant and dye baths can be calculated according to what textile one would like to dye.

To use this worksheet to calculate the amounts needed for a mordant or dye bath:

1. Weigh textile in grams and enter in the outlined cell
2. Enter in Column C: multiply the weight of the textile by the number in Column A (the normalized recipe)
3. For example, if dyeing with madder and weight of textile is 2g:
 - a. Textile amount is $2 \times 1 = 2\text{g}$
 - b. Madder amount is $2 \times 2 = 4\text{g}$
 - c. Water amount is $2 \times 100 = 300\text{g}$

MORDANT RECIPES

Alum	Normalized amount (g)	Weigh textile (g)	Amount (g)
	Column A	Column B	Column C
textile	1		
alum	0.2	<i>Multiply weight of textile by number in Column A (normalized recipe)</i>	
water	50		

Iron sulfate	Normalized amount (g)	Weigh textile (g)	Amount (g)
	Column A	Column B	Column C
textile	1		
iron sulfate	0.1	<i>Multiply weight of textile by number in Column A (normalized recipe)</i>	
water	50		

DYE RECIPES

Madder	Normalized amount (g)	Weigh textile (g)	Amount (g)
	Column A	Column B	Column C
textile	1		
madder	2	<i>Multiply weight of textile by number in Column A (normalized recipe)</i>	
water	100		

Cochineal	Normalized amount (g)	Weigh textile (g)	Amount (g)
	Column A	Column B	Column C
textile	1		
cochineal	0.125	<i>Multiply weight of textile by number in Column A (normalized recipe)</i>	
water	62.5		

Kermes	Normalized amount (g)	Weigh textile (g)	Amount (g)
	Column A	Column B	Column C
textile	1		
kermes	0.5	<i>Multiply weight of textile by number in Column A (normalized recipe)</i>	
water	62.5		

Kermes - ¼ amount	Normalized amount (g)	Weigh textile (g)	Amount (g)
	Column A	Column B	Column C
textile	1		
kermes	0.125	<i>Multiply weight of textile by number in Column A (normalized recipe)</i>	
water	62.5		

Weld	Normalized amount (g)	Weigh textile (g)	Amount (g)
	Column A	Column B	Column C
textile	1		
weld	1	<i>Multiply weight of textile by number in Column A (normalized recipe)</i>	
water	100		

