

Blacksmith Soap for my Brother, the Blacksmith - with Borax & Pumice - 2017April09

Combination Borax & Pumice Blacksmith soap, includes Honey, fragrance, color, and EDTA - made April 9, 2017 (layered)

Recipe Oils

Oil	%	Grams
Castor Oil	5	50
Coconut Oil, 76 deg	20	200
Crisco, new w/palm	30	300
Lard, Pig Tallow (Manteca)	30	300
Olive Oil	15	150
	100	1,000

Recipe Totals

Total Water Weight	181 grams
Total NaOH Weight	136.8 grams
Total KoH Weight	11.2 grams at 90% purity
Total Lye Weight	148.1 grams
Total Oil Weight	1,000 grams
Fragrance Oil Weight	60 grams
Total Batch Weight	1,389 grams
Superfat	2%
Lye Concentration	45%
NaOH / KOH Ratio	95% / 5%
Water : Lye Ratio	1.222 : 1
Saturated : Unsaturated	38 : 62

Summaries

Property	%	Recommended	Fatty Acids %
Bubbly	18	14 - 46	Lauric10
Cleansing	14	12 - 22	Linoleic16
Condition	57	44 - 69	Linolenic2
Hardness	38	29 - 54	Myristic4
Longevity	25	25 - 50	Oleic34
Stable	29	16 - 48	Palmitic18
Iodine	69	41 - 70	Ricinoleic5
Ins	138	136 - 165	Stearic6

Notes

Borax 2.2 grams (dissolved in 25 g water); Honey 5T (dissolved in Borax sol’n); Pumice 3T=33 grams (add at trace);c EDTA 18 g of 39% solution (7 g of 50% sol’n) add to melted oils; FO = Dragon’s Blood (60 g as listed in above calculations) add to oils; Colorant used: Hunter Green (Micas & More). Deduct water for KOH, borax & honey from ‘total water weight’. (MB Calculations: 136.8x2=273.6; Total wt lye sol’n needed=181g water+136.8g NaOH+11.2g KOH=329g; 328-273.6-11.2=44.2g water; This leaves 44.2g water to use to dissolve KOH, borax & honey.) Weigh 273.6 g 50% masterbatch lye, in tall container. Dissolve 11.2 g KOH in 19g hot water. Slowly add to NaOH sol’n, stir & cool. Boil water for borax; weigh borax & add 25g water to dissolve; Dissolve honey in warm borax sol’n, when cool slowly add to lye sol’n. Cool to room temp. Slowly stir cooled lye into melted oils. At trace, add pumice & stir by hand. Separate & color half of batter. Layer alternating colors. Soap created specifically for my brother, by Earlene