

INTRODUCTION	6
GENERAL NOTES ON MAKING PRODUCTS	7
HOW TO MAKE SUBSTITUTIONS	8
AND KEEP IN MIND, IT TAKES TIME TO MAKE THE PERFECT PRODUCT FOR YOUR SKIN OR HAIR TYPE.....	9
EQUIPMENT YOU'LL NEED TO MAKE SHAMPOO BARS	9
OPTIONAL EQUIPMENT.....	9
THINGS TO KNOW WHEN MAKING HAIR CARE PRODUCTS	10
CATEGORIES OF SHAMPOO.....	10
LET'S TALK HAIR TYPES	11
BASE FORMULA FOR A pH BALANCED SHAMPOO BAR	13
BASE FORMULA FOR pH BALANCED SHAMPOO BAR	14
IF YOU'RE USING SCI POWDER.....	15
IF YOU'RE USING PRILLS, NOODLES, OR FLAKES THAT NEED TO BE MELTED	16
SOME QUESTIONS THAT COME UP AFTER YOU MAKE YOUR FIRST SHAMPOO BARS	17
WHY IS pH SO IMPORTANT IN SHAMPOO BARS?	19
QUICK ASIDE: CAN I USE TESTING STRIPS TO MEASURE pH?.....	20
WHAT TO LOOK FOR IN A pH METER? AND MY COMPARISONS BETWEEN METERS.	
20	
WHAT'S THE BEST WAY TO ALTER THE pH OF A SHAMPOO BAR?	22
I'M ADDING THE ACID, BUT THE pH ISN'T COMING DOWN!	24
WHY CAN'T I ADJUST THE pH OF MY HANDMADE LIQUID OR BAR SOAP TO BE MORE HAIR FRIENDLY?	24
WHAT'S A SURFACTANT?.....	25
QUICK ASIDE: NON-IONIC, ANIONIC, CATIONIC, and AMPHOTERIC	25
PRIMARY AND SECONDARY SURFACTANTS.....	25
BUBBLES, FOAM, AND LATHER	26
CLEANSING.....	26
ACTIVE SURFACTANT MATTER	27
THINGS TO NOTE WHEN WORKING WITH SOLID SURFACTANTS.....	28

HOW TO BEST MELT SCI OR OTHER POWDERED SURFACTANTS IN A DOUBLE BOILER.....	28
LET'S MEET THE POWDERED SURFACTANTS	29
SODIUM COCOYL ISETHIONATE (SCI)	29
SODIUM LAURYL SULFOACETATE (SLSa)	29
BIOTERGE AS-90 (INCI: C14-16 olefin sulfonate)	30
SODIUM METHYL COCOYL TAURATE	30
SODIUM COCO SULFATE (SCS)	30
DISODIUM LAURETH SULFOSUCCINATE (DLS)	30
LET'S MEET THE LIQUID SURFACTANTS	31
SURFACTANT BLENDS	32
MODIFYING THE SURFACTANTS IN OUR BASE SHAMPOO BAR FORMULA ...	33
QUICK ASIDE ABOUT CREATING CLARIFYING SHAMPOO BARS	35
EMOLLIENTS	36
MOISTURIZING & CONDITIONING SHAMPOO BAR WITH SOLID OILS OR BUTTERS..	
37	
MOISTURIZING & CONDITIONING SHAMPOO BARS WITH FATTY ACIDS OR ALCOHOLS	39
CAN YOU ADD SILICONES AS EMOLLIENTS?	40
MOISTURIZING & CONDITIONING SHAMPOO BARS WITH SILICONES ("OIL FREE")	
40	
HUMECTANTS	42
CONDITIONING & HYDRATING SHAMPOO BARS WITH HUMECTANTS	43
CONDITIONING & HYDRATING BARS WITH A TON OF HUMECTANTS	44
MOISTURIZING, CONDITIONING, AND HYDRATING SHAMPOO BARS	45
HYDROLYZED PROTEINS AND AMINO ACIDS	47
CONDITIONING, HYDRATING & FILM FORMING SHAMPOO BARS	48
VITAMINS & PRESERVATIVES	49
CONDITIONERS AND CATIONIC POLYMERS	50
CONDITIONERS OR CATIONIC QUATERNARY COMPOUNDS.....	50
CONDITIONING SHAMPOO BARS WITH CATIONIC QUATERNARY COMPOUNDS	51

CATIONIC POLYMERS	52
CONDITIONING SHAMPOO BARS WITH CATIONIC COMPOUNDS AND CATIONIC POLYMERS	53
2-IN-1 CONDITIONING SHAMPOO BARS.....	54
IF YOU HAVE FINE HAIR.....	55
CONDITIONING SHAMPOO BARS FOR FINE HAIR.....	55
AN ASIDE ABOUT VIRGIN AND DAMAGED HAIR.....	57
BOTANICAL EXTRACTS	58
HOW TO USE POWDERED EXTRACTS IN A SHAMPOO BAR	58
HORSETAIL EXTRACT.....	58
BAMBOO EXTRACTS	58
CHAMOMILE EXTRACT.....	59
LYCOPENE BIOFERMENT.....	59
ROSEMARY EXTRACT	60
ROSEHIP EXTRACT.....	60
BURDOCK ROOT EXTRACT	61
WALNUT EXTRACT (LIQUID)	61
CONDITIONING SHAMPOO BARS WITH BOTANICAL EXTRACTS.....	61
EXFOLIATING BOTANICAL EXTRACTS	63
WILLOW BARK EXTRACT	63
PAPAYA EXTRACT	63
PINEAPPLE EXTRACT.....	64
HONEYSUCKLE EXTRACT	64
GRAPESEED EXTRACT	64
ESSENTIAL OILS	66
FRAGRANCE OILS	66
COLOURING BARS.....	66
EVERYTHING BUT THE KITCHEN SINK pH BALANCED SHAMPOO BAR	67
DUPLICATION OF LUSH'S JUMPING JUNIPER SHAMPOO BAR	69
POTENTIAL DUPLICATION OF LUSH'S JUMPING JUNIPER SHAMPOO BAR USING SCS.....	70