

<b>INTRODUCTION .....</b>	<b>7</b>
<b>GENERAL NOTES ON MAKING PRODUCTS .....</b>	<b>9</b>
PRODUCT PROTECTION INGREDIENTS: ANTI-OXIDANTS & PRESERVATIVES.....	12
CHOOSING PRESERVATIVES .....	13
PRESERVATIVE COMPARISON CHART.....	14
QUICK NOTE ON ELECTRICAL CHARGES .....	15
HOW TO MAKE PRODUCTS MORE ORGANIC OR NATURALLY COMPLIANT? .....	17
LINK TO A SERIES ON MY SITE ABOUT USING FRAGRANCE OILS IN OUR PRODUCTS!.....	17
<b>DEFINING SOME SCIENTIFIC TERMS: SOLUBILITY, VISCOSITY, SURFACE TENSION, AND INTERFACES .....</b>	<b>18</b>
<b>DEFINING SOME SCIENTIFIC TERMS: CONTACT ANGLE, WETTING, REFRACTIVE INDEX, AND SPECIFIC GRAVITY .....</b>	<b>23</b>
<b>VISCOSITY: HOW TO MEASURE IT? .....</b>	<b>26</b>
VISCOSITY COMPARISON LIST .....	27
<b>DEFINING SOME COSMETIC CHEMISTRY TERMS: SPREADABILITY, PLAY TIME, CUSHION, DRAG, SLIP &amp; GLIDE, AND MELT POINT .....</b>	<b>29</b>
<b>QUICK SUMMARY OF PROPERTIES .....</b>	<b>35</b>
<b>SENSORY COMPARISON CHART FOR MANY LIQUID EMOLLIENTS.....</b>	<b>36</b>
<b>EMOLLIENT COMPARISON CHART: SENSORY CHARACTERISTICS (BLANK) ....</b>	<b>39</b>
<b>PART ONE: INTRODUCTION TO THE CONCEPT OF COMBINING EMOLLIENTS</b>	<b>41</b>
<b>PART TWO, SPREADABILITY AND SPREADING VALUES .....</b>	<b>45</b>
TABLE OF SPREADING VALUES & VISCOSITY FOR VARIOUS LIQUID EMOLLIENTS..	47
<b>LET'S CREATE A LOTION WITH POLAWAX OR E-WAX NF USING NATURAL OILS.....</b>	<b>49</b>
COMMONLY FOUND EMULSIFIERS SENSORY CHARACTERISTIC COMPARISON CHART .....	50

SENSORY COMPARISON CHART FOR POLAWAX/E-WAX NF LOTION WITH NATURAL OILS.....	55
COMBINING EMOLLIENTS (PART TWO): LIGHT, NON-GREASY, MEDIUM SPREADING HAND LOTION WITH POLAWAX OR E-WAX NF (FORMULA).....	56
BASIC INSTRUCTIONS FOR MAKING A LOTION WITH POLAWAX OR EMULSIFYING WAX NF.....	57
<b>LET'S CREATE A LOTION WITH POLAWAX OR E-WAX NF USING ESTERS .....</b>	<b>60</b>
SIMPLE ESTER COMPARISON CHART WITH SENSORY CHARACTERISTICS.....	61
STRUCTURING AGENT COMPARISON CHART WITH LINKS (SUMMARY) .....	62
SUBSTITUTIONS FOR ONE OR TWO OILS! .....	63
SENSORY COMPARISON CHART & SPREADING VALUES - POLAWAX OR E-WAX NF FORMULA WITH ESTERS .....	64
LIGHT, NON-GREASY, MEDIUM SPREADING HAND LOTION WITH POLAWAX OR E-WAX NF - ESTERS!.....	64
CREATING A FORMULA WITH ALL THE ESTERS! .....	65
TABLE OF SPREADING VALUES & VISCOSITY FOR VARIOUS LIQUID EMOLLIENTS..	66
COMBINING EMOLLIENTS (SPREADING VALUES): LIGHT, NON-GREASY, FAST SPREADING HAND LOTION WITH POLAWAX OR E-WAX NF - ALL THE ESTERS! (FORMULA) .....	68
MORE FORMULAS ON MY SITE USING ESTERS! .....	69
<b>LET'S CREATE A LOTION WITH SIMULSOL/LOTIONPRO™ 165! .....</b>	<b>71</b>
SIMULSOL/LOTIONPRO™ 165 (INCI: GLYCERYL STEARATE (AND) PEG 100 STEARATE) .....	71
SENSORY COMPARISON CHART FOR A SOME COMMONLY FOUND EMULSIFIERS... 74	
COMBINING EMOLLIENTS (PART TWO): LIGHT, NON-GREASY, MEDIUM SPREADING HAND OR BODY LOTION WITH SIMULSOL/LOTIONPRO™ 165 .....	75
<b>PART THREE, LIQUID AND SOLID EMOLLIENTS, AND THE IMPACT OF SATURATION .....</b>	<b>77</b>
FATTY ACIDS AND SATURATION .....	78
IODINE VALUES .....	79
WHAT CAN WE LEARN FROM IODINE VALUES? .....	81
LET'S LOOK AT THE INFORMATION WE CAN GATHER FROM IODINE VALUES!.....	81
CONSIDERING IODINE VALUES AND SPREADABILITY OF EMOLLIENTS.....	82

CONSIDERING IODINE VALUES AND SPREADABILITY OF EMOLLIENTS - WITH ANSWERS .....	84
<b>PREDICTING SENSORY CHARACTERISTICS OF A LOTION .....</b>	<b>87</b>
COMBINING EMOLLIENTS (PART TWO): LIGHT, NON-GREASY, MEDIUM SPREADING HAND LOTION WITH POLAWAX OR E-WAX NF (FORMULA) .....	87
CONSIDERING IODINE VALUES AND SPREADABILITY OF EMOLLIENTS - FOR LOTION #1 .....	88
LET'S TAKE A LOOK AT THE FATTY ACID COMPOSITION OF SOME OILS! .....	88
<b>APPLYING THESE CONCEPTS: WHY COCONUT OIL &amp; SHEA BUTTER DON'T MIX WELL! .....</b>	<b>92</b>
BEFORE WE BEGIN.....	92
WHY TEMPERATURE IS SO IMPORTANT WHEN WE'RE USING BUTTERS? .....	93
SOLID OIL & BUTTER FATTY ACID PROFILE & MELTING POINT CHART! .....	94
AN ASIDE ON IODINE VALUES, BUTTERS & SOLID OILS!.....	96
LET'S TALK ABOUT TRIGLYCERIDES! .....	96
MELTING POINTS OF TRIGLYCERIDES.....	97
THE IMPORTANCE OF TEMPERATURE AND CRYSTALS! .....	98
WHAT DOES THIS MEAN FOR OUR BUTTERS?.....	99
BLOOM & GRAINS IN BUTTERS? .....	100
QUICK SUMMARY OF THE CONCEPTS SO FAR... ..	101
HOW DIFFERENCES IN SIZE AND SHAPES OF TRIGLYCERIDES CAN CAUSE ISSUES! ..	102
THIS CAN HAPPEN WITH COCONUT OIL AND ANY OTHER BUTTER.....	104
WHAT CAN YOU DO TO AVOID GRAINS? .....	105
<b>PART THREE: QUICK SUMMARY! .....</b>	<b>107</b>
<b>APPLYING WHAT WE'VE LEARNED SO FAR TO CREATE A NATURALLY COMPLIANT EMULSION .....</b>	<b>109</b>
HAND LOTION FORMULA WITH RITAMULSE SCG (FIRST FORMULA).....	109
INSTRUCTIONS FOR MAKING A LOTION WITH RITAMULSE SCG (GERMALL PLUS VERSION).....	110
LET'S LOOK AT THE EMOLLIENTS!.....	110
OIL COMPARISON CHART - IODINE VALUES AND FATTY ACID PROFILES .....	111

OIL COMPARISON CHART - IODINE VALUES AND FATTY ACID PROFILES WITH ALL THE INFORMATION .....	112
<b>APPLYING MORE OF WHAT WE'VE LEARNED TO A QUICK, COLD PROCESS, 10 MINUTE LOTION.....</b>	<b>115</b>
SUBSTITUTING OTHER COLD EMULSIFIERS FOR THIS ONE! .....	115
10 MINUTE, CATIONIC, NATURALLY COMPLIANT LOTION with babassu oil (FORMULA) .....	116
COLD PROCESS INSTRUCTIONS FOR JEEN EMULSIFIERS .....	117
WARM PROCESS INSTRUCTIONS for JEEN EMULSIFIERS.....	117
WHAT ARE THE SENSORY CHARACTERISTICS, SKIN FEEL, VISCOSITY, AND SPREADABILITY OF THE JEEQUAT® NDCS OR JEESPERSE® ICE-T CPCS VERSIONS?....	117
SILICONE SUBSTITUTES? .....	118
10 MINUTE COLD PROCESS LOTION with babassu oil & SILICONE REPLACEMENTS (FORMULAS).....	121
LET'S CONTINUE MODIFYING THE EMOLLIENTS! .....	121
10 MINUTE CATIONIC LOTION WITH BABASSU OIL & HIGH IODINE VALUE OILS (FORMULAS).....	123
<b>LET'S TAKE A LOOK AT SOLID OILS &amp; BUTTERS! .....</b>	<b>125</b>
SENSORY COMPARISON CHART FOR SOLID OILS & BUTTERS .....	125
TRIGLYCERIDE COMPARISON CHART FOR VARIOUS BUTTERS .....	127
SOLID FAT CONTENT (SFC) AND MELTING PROFILE! .....	128
QUICK SUMMARY! .....	129
BEFORE WE LEAVE THIS SECTION.....	130
<b>LET'S MAKE A GORGEOUS ANHYDROUS WHIPPED BODY BUTTER!.....</b>	<b>132</b>
CREATING AN ANHYDROUS WHIPPED BODY BUTTER (BASE FORMULA) .....	133
INSTRUCTIONS FOR MAKING A WHIPPED BUTTER! .....	133
IMPORTANT NOTE: MAKE SMALLER BATCHES.....	134
CREATING AN ANHYDROUS WHIPPED BODY BUTTER (SMALLER BATCH FORMULA)..	135
LET'S MAKE A MODIFICATION TO THE BUTTER! .....	135
CREATING AN ANHYDROUS WHIPPED BODY BUTTER WITH 10% STIFFER BUTTER (FORMULA) .....	136
COULD WE ADD A SOLID OIL? .....	137

WHAT CAN WE DO FOR THE LIQUID OIL? .....	137
CREATING AN ANHYDROUS WHIPPED BODY BUTTER - ALTERING THE LIQUID EMOLLIENTS, 25 GRAM BATCH (FORMULA) .....	138
<b>CONCLUSION .....</b>	<b>139</b>
MY BLOG, POINT OF INTEREST .....	139
THANK YOU TO MY AMAZING SUBSCRIBERS.....	139
HOW TO CONTACT ME .....	139
SUPPLIERS' INFORMATION .....	139
<b>General references for this series.....</b>	<b>141</b>

Written by Susan Barclay Nichols, better known as SwiftCraftyMonkey, blogger and formulator for the blog Point of Interest (<http://swiftcraftymonkey.blog>).

© 2023 by Susan Barclay Nichols. All rights reserved. This e-book or any portion thereof may not be reproduced in any form without the express written permission of the author, except as permitted by Canadian copyright law. The products you make from formulas contained in this e-book can be used by you for personal or commercial purposes, but please don't copy and paste the text or share this entire e-book on sites like Scribd or forward to your friends who aren't subscribers to the blog. Instead, please refer them to my shop or refer them to the site. Have fun formulating!