MAYHEM SUPPLY

6401 E SPRAGUE AVE, SPOKANE VALLEY, WA 99212

MAKING SOAP WITH COLOR

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COLOR THEORY

PRIMARY COLORS

RED, YELLOW & BLUE - CANNOT BE MADE BY ANY OTHER COLORS

SECONDARY COLORS

GREEN, ORANGE, PURPLE - MADE BY MIXING PRIMARY COLORS TOGETHER.

GREEN = YELLOW + BLUE

ORANGE = RED + YELLOW

PURPLE = BLUE + RED

TERTIARY COLORS

COMBINE SECONDARY COLORS

COMPLEMENTARY / CONTRASTING COLORS

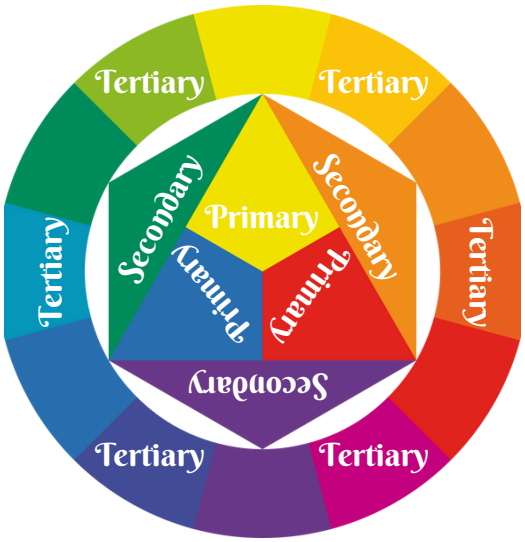
OPPOSITE OF EACH OTHER ON THE COLOR WHEEL, BOLD, PROVIDING HIGH CONTRAST AND HIGH IMPACT

RED - GREEN

ORANGE - BLUE

YELLOW - PURPLE

USE BLACK &/OR WHITE WITH THESE COLOR PAIRS TO ADD MORE CONTRAST TO YOUR SOAP



HUE - A PURE COLOR THAT HAS HAD NOTHING ADDED TO IT TO CHANGE ITS PROPERTIES.

MONOCHROME - VARYING TONES OF A SINGLE COLOR, DOES NOT NEED TO BE BLACK & WHITE!

TINT - TINTS ARE CREATED WHEN WHITE IS ADDED TO ANY HUE ON THE COLOR WHEEL, LIGHTENING AND DESATURATING THE HUE.

TONE - TONES ARE CREATED WHEN GREY IS ADDED TO A COLOR. THE TONE DEPENDS ON THE LEVEL OF BLACK/WHITE IN THE GREY USED. TONES MAY BE LIGHTER OR DARKER THAN THE ORIGINAL HUE.

SHADE - SHADES ARE CREATED BY ADDING BLACK TO ANY HUE ON THE COLOR WHEEL. THIS DARKENS THE HUE & CREATES A MORE INTENSE COLOR.

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COLORANT TYPES

BOTANICALS

BOTANICALS, OR PLANT MATERIALS, CAN CREATE COLORS IN SOAPS & COSMETICS USING BOTH OIL & WATER. A VERY STRONG TEA (DECOCTION) CAN BE USED FOR THE LIQUID PORTION OF THE LYE SOLUTION, OR OIL INFUSIONS CAN BE USED AS A PARTIAL TO FULL REPLACEMENT OF THE OILS IN YOUR SOAP RECIPE. CARE MUST BE TAKEN TO BE AWARE OF HOW A PARTICULAR HERB/BOTANICAL WILL REACT TO THE ALKALINITY OF THE LYE. SOME HERB COLORATIONS CAN WITHSTAND THE INTRODUCTION OF LYE & SOME CANNOT. COLORS CREATED FROM BOTANICALS ARE TYPICALLY CONSIDERED "NATURAL" COLORANTS.

CHARCOAL

ACTIVATED CHARCOAL IS USED AS COLORANT FOR SOAPS & COSMETICS. ITS MADE FROM A PROCESS THAT INVOLVES MIXING POWDERED HARDWOOD CHARCOAL, OR CHARCOAL MADE FROM OTHER PLANT MATERIALS LIKE COCONUT SHELLS, WITH A CHEMICAL SUCH AS CALCIUM CHLORIDE THAT IS THEN HEATED TO A HIGH TEMPERATURE. THE CHARCOAL IS POWDERED & CAN BE ADDED TO WATER, OIL, OR GLYCERIN. CHARCOAL CAN BE USED TO CREATE SHADES FROM LIGHT TO DARK GREY, AND EVEN BLACK. THE DARKER THE COLOR THE MORE CHARCOAL REQUIRED. TOO MUCH CHARCOAL CAN MAKE THE SOAP/COSMETIC GRITTY AND DIFFICULT TO CUT. CHARCOAL IS TYPICALLY CONSIDERED TO BE A "NATURAL" COLORANT.

CLAYS

CLAYS ARE SOURCED FROM WETLANDS AND RIVER BOTTOMS, MAKING WATER THE PERFECT CARRIER FOR YOUR NATURAL COLORANT. USE 1 TSP CLAY TO 1 TBLS WATER TO BEGIN. MORE CAN BE ADDED BUT CLAY WILL ACCELERATE TRACE & TOO MUCH WILL BECOME VERY GRITTY DIFFICULT TO CUT. CLAYS WILL ALSO PULL ALL OF THE WATER FROM YOUR SOAP IF THEY AREN'T HYDRATED, LEAVING CRUMBLY OR BRICK HARD SOAP. CLAYS ARE TYPICALLY CONSIDERED "NATURAL" COLORANTS.

FD & C COLORANTS (DYES)/LAKES

FD&C DYES/LAKES ARE WATER SOLUBLE COLOR ADDITIVES SUBJECT TO CERTIFICATION UNDER THE FEDERAL FOOD, DRUG & COSMETICS ACT. EACH COLOR IS MASSIVELY CONCENTRATED AND MUST BE BATCH CERTIFIED. DEPENDING ON THE SHADE DESIRED, APPROXIMATELY 1/32 TSP IS ALL THAT IS NEEDED TO COLOR AN 8 LB BATCH OF SOAP. THEY ARE THE MOST COST EFFECTIVE COLORANTS, THOUGH THE MOST DIFFICULT TO ACHIEVE CONSISTENT RESULTS IN SOAP DUE TO THEIR RELIANCE ON HEAT TO DEVELOP. THEY ARE ALSO UV LIGHT SENSITIVE, MEANING THEY WILL MORPH IN SUNLIGHT, LAKES ARE MORE COMMONLY USED IN BATH BOMBS WHILE DYES ARE MOST OFTEN USED IN SOAP & THE CREATION OF OTHER COLORANTS SUCH AS MICAS. DYES/LAKES ARE TYPICALLY CONSIDERED "SYNTHETIC" COLORS.

MICAS

WHILE MICA IS A NATURALLY OCCURRING MINERAL, MICAS STRAIGHT FROM THE EARTH SHOULD NOT BE USED IN SOAP OR COSMETICS DUE TO THE HIGH POTENTIAL OF CONTAMINATION FROM OTHER MINERALS SUCH AS SULFUR & HEAVY METALS. "NATURE IDENTICAL" SKIN-SAFE MICAS ARE CREATED IN A LAB & APPROVED BY THE FDA. MICAS COME IN A RANGE OF VARIOUS COLORS AND ARE CREATED USING DYES, LAKES, TITANIUM DIOXIDE AND OTHER SKIN-SAFE CHEMICALS/MINERALS MIXED WITH THE NATURE IDENTICAL MICA CRYSTAL. MICAS ARE THE MOST CONSISTENT AND EASY SOAP COLORANT TO USE, THOUGH ARGUABLY THE MOST EXPENSIVE. MICAS CAN BE MIXED IN OIL, WATER, OR GLYCERIN & OFTEN WHAT YOU SEE IS WHAT YOU GET.
SKIN-SAFE MICAS ARE CONSIDERED "SYNTHETIC" COLORANTS.

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COLORANT TYPES

OXIDES

OXIDES ARE OPAQUE AND STRONG TINTING MAN-MADE COLORS, RELIABLE TINTERS SUITABLE FOR ALL MEDIUMS INCLUDING ARTS AND CRAFTS, PLASTERS, CEMENTS AND MORE. THEY ARE MANUFACTURED BY THE SYNTHESIS OF NATURAL INGREDIENTS, BEING NON-TOXIC AND RESPONSIBLY PRODUCED. THOSE USED IN COSMETICS ARE NOT REQUIRED TO BE BATCH CERTIFIED BUT THEY ARE SUBJECT TO REGULATION BY THE FDA. TYPICALLY A TSP OF OXIDE COLORANT WILL EASILY COLOR AN 8 LB BATCH OF SOAP. OXIDES ARE OIL SOLUBLE & TYPICALLY CONSIDERED "SYNTHETIC" COLORS.

PIGMENTS

PIGMENTS IN COSMETICS HAVE BEEN A PART OF HUMAN CULTURE FOR CENTURIES. THEY DATE BACK TO ANCIENT EGYPTIANS AND SUMERIANS WHO CAME UP WITH TECHNIQUES TO PRODUCE MAKEUP. THEY USED CLAY, SEMI-PRECIOUS STONES, PAPRIKA, TURMERIC, SEAWEED EXTRACT, AND MANY OTHER NATURAL MATERIALS TO MAKE AN ARRAY OF BRIGHT COLORS. PIGMENTS TODAY ARE LAB CREATED AND UNDER THE REGULATION OF THE FDA. PIGMENTS ARE "PIGGISH", REQUIRING USUALLY DOUBLE TP TRIPLE THE AMOUNT OF PRODUCT USED TO COLOR THE SAME AMOUNT OF SOAP AS ANY OTHER SOAP COLORANT. PIGMENTS ARE CONSIDERED A "SYNTHETIC" COLORANT.

TITANIUM DIOXIDE

TITANIUM DIOXIDE (TO2) IS AN INORGANIC COMPOUND DERIVED FROM TITANIUM. TO2 IS A WHITE SOLID PIGMENT THAT IS INSOLUBLE IN WATER, THOUGH WATER IS USED TO DISPERSE IT IN THE PROCESS OF SOAP MAKING. TO2 IS ALSO USED IN THE MAKING OF SUNSCREEN, PAINT, MICAS & FOOD COLORING. TO USE MICA IN SOAP MIX AT A RATIO OF 1:4, TO2:WATER, ADDING 1-2 TBLS OF DISPERSED TO2 INTO AN 8LB BATCH OF SOAP. THE MORE TO2 USED THE HIGHER THE POSSIBILITY OF GLYCERIN RIVERS AND TOO MUCH TO2 CAN SPEED UP TRACE. TO2 CAN BE USED TO ALTER THE HUES OF COLORS. TO2 IS CONSIDERED A "NATURAL" COLORANT.

ULTRAMARINES

COLOR ADDITIVES, ULTRAMARINES (BLUE, GREEN, PINK, RED, AND VIOLET) ARE PIGMENTS OBTAINED BY CALCINING AT TEMPERATURES ABOVE 700 °C. A MIXTURE OF KAOLIN, SULFUR, SODIUM CARBONATE, SILICIOUS MATTER, SODIUM SULFATE, AND CARBONACEOUS MATTER, BUT NOT NECESSARILY ALL THESE SUBSTANCES, TO PRODUCE A SINGLE COLOR. THE ULTRAMARINES ARE COMPLEX SODIUM ALUMINUM SULFOSILICATES HAVING A TYPICAL FORMULA NA(ALSIO)S WITH PROPORTIONS OF EACH ELEMENT VARYING WITH EACH COLOR.

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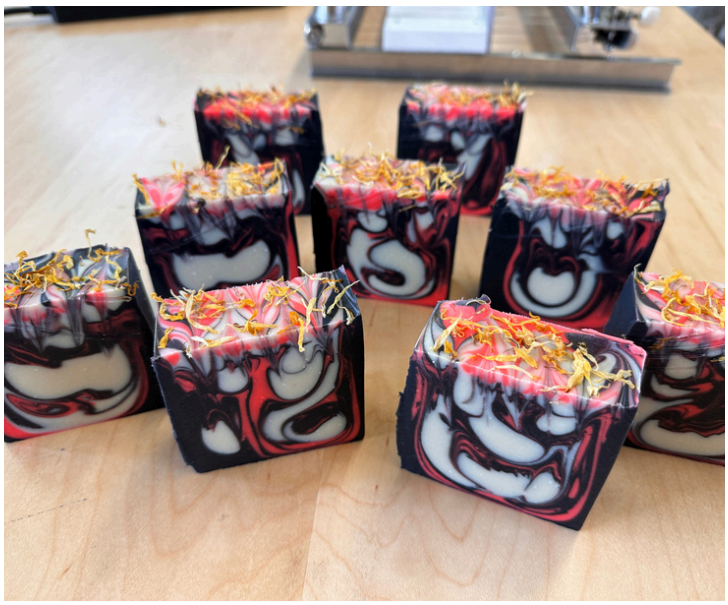
REFERENCE CHART

EASY COLOR CHART	WATER SOLUBLE	OIL SOLUBLE	INFUSION	GLYCERIN
BOTANICALS	★	★	★	
CHARCOAL	★	★	★	★
CLAYS	★			
FD&C DYES	★			
MICAS	★	★		★
OXIDES		★		★
PIGMENTS		★		★
TITANIUM DIOXIDE	★			
ULTRAMARINES		★		★

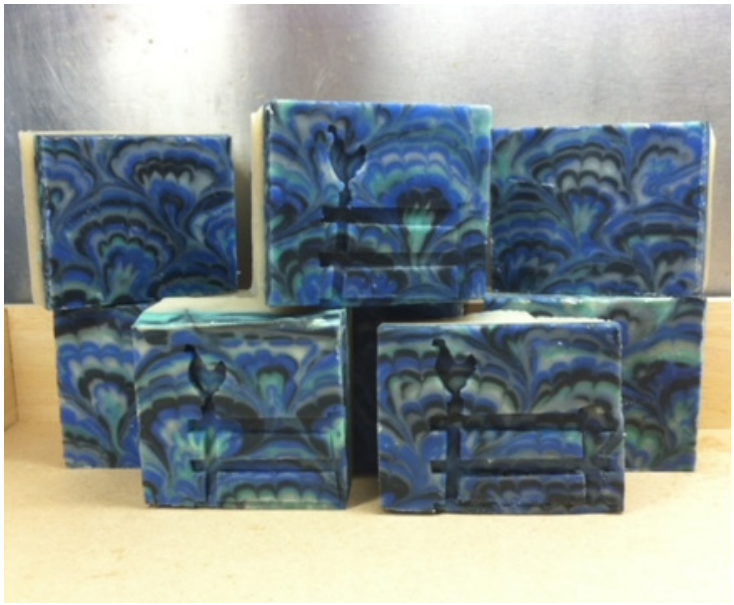
MAYHEM SUPPLY

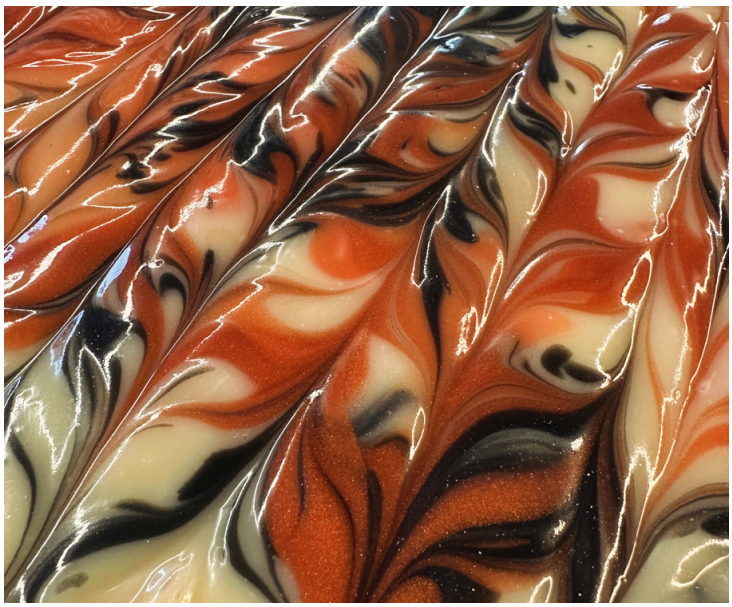
FUN SWIRL DESIGNS WITH COLOR

DROP

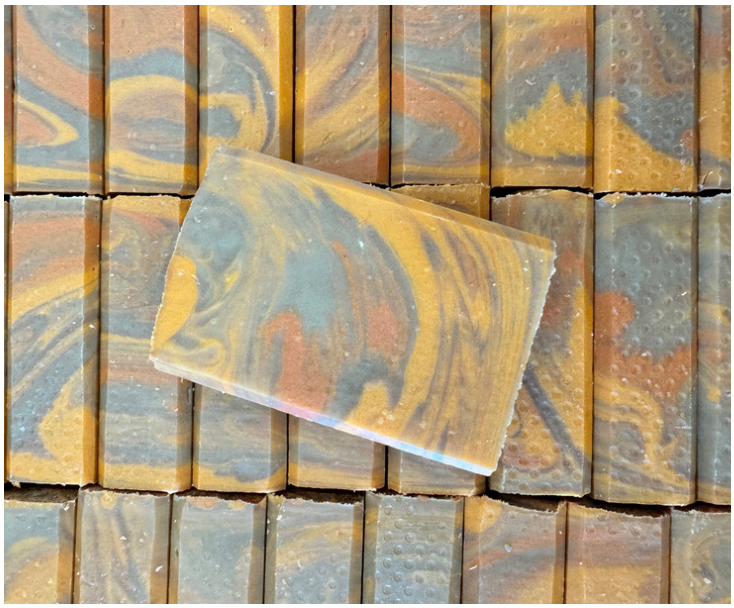


PEACOCK





TIGER



IN-THE-POT