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SAM HD Silicone Earth Colors can be used to adjust existing silicone skin colors and to build your own custom silicone skin tones from scratch.

Human skin colors span a narrow range on the color wheel - yellow, orange and red.

Realistic skin colors are never very bright.

They are basically muted Pinks, Beiges and Browns.

Using primary colors to make convincing skin tones can take a lot of balancing skill. For beginners, it can be off-putting. For seasoned pros too.

Using primary colors can result in skin colors that are either too orange or too green.

Earth Colors are a better starting point to mimic natural looking skin tones of any ethnicity. Being *naturally muted* they make it easier than when using bright primary colors.



SAM HD Earth Pigments are: White Oxide, Buff Oxide, Yellow Oxide, Raw Sienna, Red Oxide Burnt Sienna, Burnt Umber, Raw Umber, Black Oxide and Green Oxide (not pictured)

Adjusting Existing Silicone Skin Colors

Customize existing silicone skin colors: add drops of SAM HD Earth Pigments to get the tonal adjustment you need. Record how many drops (or grams) of the ready-made color and how many added drops of SAM Earth Pigments so colors can be repeated.



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Making Custom Skin Tones with SAM HD Silicone Earth Colors

Human skin tones can be divided into 4 basic tonal / value groups:

Light / Mid / Deep / Dark

Use the following SAM Earth Colors as starting points for mixing custom skin tones:

LITE Red Oxide / Yellow Oxide / White Oxide / Green Oxide / Burnt Umber

MID Burnt Sienna / Raw Sienna / Buff Oxide / Yellow Oxide / Raw Umber

DEEP Burnt Sienna / Raw Sienna / Buff Oxide / Burnt Umber / Raw Umber

DARK Burnt Umber / Raw Umber / Burnt Sienna / Raw Sienna / Black Oxide / Buff Oxide

Tips for mixing silicone skin tone colors with SAM HD Earth Colors:

Alway shake bottles well before use. This helps give more consistent results. Periodically test color in silicone as it is developed to give a true representation of what it will look like. Colors look different mixed into silicone than in a cup.

Many human base skin colors contain a good amount of Yellow Oxide or Raw Sienna. (Blush reds and pinks are usually added during painting or intrinsic layering.) Some dark skin tones will probably have a little White Oxide or Buff Oxide in them. Some light skin tones can be as much as 95% White Oxide. Green Oxide is used to counter the orange tone of Red Oxide, while adding a degree of grayness, giving a rosier, ruddy tone.

MIXING LITE SKIN TONES

Color Palate Red Oxide / Yellow Oxide / White Oxide / Green Oxide / Burnt Umber



Approximate the red-orange-yellow balance with Red Oxide and Yellow Oxide. Adjust lightness with White Oxide.



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Offset any unwanted orange tone with Green Oxide. Adjust darkness and grayness with Burnt Umber Adjust these 5 colors as needed.

MIXING MID SKIN TONES

Color Palate Burnt Sienna / Raw Sienna / Buff Oxide / Yellow Oxide / Raw Umber



Approximate the red-orange-yellow balance with Burnt and Raw Sienna, Yellow Oxide. Adjust lightness with Buff Oxide.

Adjust darkness and grayness with Raw Umber and / or more Siennas. Adjust these 5 colors as needed.

note: Many Latin and Island skin tones are rich in Raw Sienna.

MIXING DEEP SKIN TONES

Color Palate Burnt Sienna / Raw Sienna / Buff Oxide / Burnt Umber / Raw Umber



Approximate the red-orange-yellow balance with Burnt and Raw Sienna. Adjust lightness with Buff Oxide.

Adjust depth With Burnt and Raw Umber.

Adjust these 5 colors as needed.



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MIXING DARK SKIN TONES

Color Palate Burnt Umber / Raw Umber / Burnt Sienna / Raw Sienna / Black Oxide / Buff Oxide



Approximate the color balance with Burnt and Raw Umber.
Add Burnt Sienna for ruddier tones, Raw Sienna for golden tones.
Adjust darkness with Black Oxide.
Adjust lightness with Buff Oxide, if needed.
Adjust these colors as needed.

Earth Color Palate used in Cosmetic Formulas

The cosmetic industry uses a small palate of cosmetic oxides for most of their skin tone foundation colors - Red Oxide, Yellow Oxide, Black Oxide and Titanium Dioxide White.

With a bit of effort and experimentation you can make very effective silicone skin tones using just SAM Red Oxide, Yellow Oxide, Black Oxide and White Oxide.



This can be considered the **Budget All-Purpose Silicone Skin Color Palate!**

Mixing convincing skin colors with this palate takes a great deal of patience, meticulous note keeping and consistent lab technique. These 4 colors can be used to duplicate any published skin tone formula using red, yellow, black and white oxides.



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Always Remember:

SAM HD Silicone Pigments are not makeup and should never be used directly on skin. Cobalt Blue is slightly toxic with skin contact in sensitive individuals.

<u>Do not use Cobalt Blue in silicone appliances without a barrier!</u>

All other SAM HD Silicone Colors are Non-Toxic.

Many have FDA clearance for use in items intended for repeated use.

SAM Silicone Pigments may be used in silicone makeup appliances that come into direct contact with skin without use of a barrier material. e.g.: 'self-adhering' 'sticky' silicone gels when used at or below the recommended pigment level of 5%. Use less when you can. Always do a 'patch test' first on people with sensitive skin or allergies.

Play it safe.

When you can, use a barrier.

Either on the appliance, or applied to the skin, i.e.: Green Marble Sealer, Watermelon, etc. Adhesive does not count as a barrier.

Keeping Track of Your Formulas

You will want to keep track of your color mixes in a note book or color formulary for future reference so they can be repeated.

When mixing SAM HD Colors directly into small amounts of silicone, simply keep track of how many drops of which colors you use on a piece of paper.

TIP:

For large amounts and for color master batches*, where you are dealing with squirts rather than drops, it can be easier to first weigh the bottles of SAM HD Silicone Color on a scale, then squirt and blend color to your heart's content. When the color is just right, go back and weigh what color is left in each bottle. Subtract that from what was originally in the bottles, and the difference should be your color formula by weight!

* A color master batch is a large amount of a color you plan to use a lot.

Like a character's skin color that dozens of castings are to be made with so that all the castings are the same exact color, shade and translucency.

For long production runs and large pieces, a master batch can add up to pints or more.