

Quick Guide To Clays

Clays are popular ingredients in the cosmetics world, being extremely versatile and useful in a number of applications. Occurring naturally in the earth, clays are extracted and then purified of any unwanted elements. They are interesting because they can have different mineralogical compositions, colours and properties, depending on the area they come from.

Clays are insoluble but can be mixed with water or water based substances to form a paste which can be applied to the face and body. Clays can also be used in combination with many other ingredients to create an array of interesting products.

Properties of clays include being lightly exfoliating, absorbent, gently cleansing, soothing, regulating sebum and oil production, purifying and tightening. They can assist with skin issues such as acne, eczema and psoriasis, and can even have anti inflammatory and healing properties.

Types Of Clays & Their Properties

Clays are minerals with a planar, sheet-like structure which has space for water molecules to invade. Clays are also negatively charged; so when clay comes into contact with water (positively charged), the clay is activated and turns into charged hydrospheres which can attract impurities, dirt, oil and toxins. While you can mix clay with oil (eg. an anhydrous clay mask), it won't charge the ions and therefore won't have quite the same benefits.

All clays have drawing powers, where they are able to draw or suck impurities from your skin. Some will have stronger drawing powers than others however, so you will need to keep your skin type in mind when choosing the right clay for use.

Let's drill down in some details:

Kaolin Clays

Kaolin is a light clay that makes a creamy clay paste when mixed with water. It is very versatile and is the most commonly used clay in skincare and makeup. It is particularly

recommended for those with dry and more sensitive skin types, but is suitable for all skins. It has a soft and fine texture for gentle cleansing and exfoliation, and has the least swelling and drawing power out of the clays.

Kaolin clays can have different colours due to slightly varying mineral content.

White/plain kaolin clay (also known as cosmetic clay or china clay), is composed of kaolinite with trace quartz and mica, and has a pH: 7-8.

<u>Pink kaolin clay</u> is a combination of white and red kaolin clays. It is wonderful for sensitive skins and is highly effective for softening, refining, toning and renewing tired and dull-looking skin. It is also used for its healing action when mixed with herbal infusions or floral waters.

Red kaolin clay is slightly stronger than the white and pink varieties, and has a dusty red appearance. It makes a useful natural colourant in soaps. It is composed of kaolinite and illite, and has a high silica content.

<u>Green kaolin clay</u> consists of montmorillonite and illite clay minerals. It has a pH of 8-9 and like the pink kaolin, is great for sensitive and combination skin types.

Bentonite Clays

Bentonite clays are composed of volcanic ash sediments and the clay mineral montmorillonite. Bentonite clay is known for its swelling and absorbent properties, where it expands when mixed with water, and contracts when the water evaporates (which is why your skin can feel tighter as a clay mask dries). This clay is very popular for facial masks, foot baths, or bath soaking blends. It is also commonly found in cat litter!

Bentonite is a creamy but strong clay. It is great for normal, combination and oily skin types.

Like the kaolins, the bentonites can also come in different shades. We have a green clay and an off white clay.

Bentonite healing clay is one of our best sellers and is useful for treating problem skin. It has a pH: 9.13 so is best combined with something slightly acidic to bring down the pH to a more skin friendly level. It is an off-white colour. This clay is also food grade so may be ingested for its toxin-absorbing and cleansing properties.

Green bentonite clay consists mostly of the mineral montmorillonite and has a pH: 8-10.5.

Rhassoul Clay

Also known as Moroccan clay, <u>rhassoul clay</u> has been used for centuries as a cleanser and skincare ingredient. It is only mined in Morocco and consists of silica, magnesium and other trace elements. It can come in chunks, but the powder is easier to work with. It has a brown, reddish colour and a pH: 6-9. It is a medium strength clay and has some swelling properties, making it suitable for all skin types.

Rhassoul clay is popularly added to shampoos and shampoo bars because of its moisturising and conditioning properties. It is gently exfoliating and can even help with dandruff.

Myth Busting

Can you use a metal spoon when mixing clays?

There is a theory that metal ions can interfere with clay so you shouldn't use a metal utensil or metal mixing bowl when working with clay. There isn't really conclusive evidence, one way or another, on whether this is factual or not. We do know however, that stainless steel is an inert (inactive) metal, so it is totally fine to use. If you would feel more comfortable not using any metal utensils then rather use wooden or plastic/silicone utensils.

Do you need to let the clay swell before applying?

Yes! It's best to allow the clay to absorb the water and swell for 5-10 minutes before applying to your skin.

Can you preserve a ready to use clay mask?

This is one of the most frequently asked questions on clays. In short, you can but it's best to then use something like honey as the hydrating agent, not water. We have a blog on this here: Preservative Free Honey & Clay Mask. The combination of clay and water is very difficult to effectively preserve. We suggest rather premixing your clay powder and other dry ingredients in a jar, and then scooping some out and blending with water or other liquid to make a paste when you want to use it.

Can you ingest clays?

Yes you can ingest <u>food grade clays</u>, which may present healing properties internally.

Working With Clays

Clays are dried powders, which makes them easy to use. They need to be activated with water or another aqueous based substance, eg. hydrosol.

Clays are most commonly used in skincare in <u>face masks</u>, or in <u>soap</u> for their nourishing properties. They can also be used as light colourants, depending on the shade of clay used.

Other ways to use them are in <u>scrubs</u>, homemade <u>powder cleansers</u>, baby powder, body wraps, <u>DIY toothpaste</u>, a mineralising bath soak powder, or even around the home and garden. Clays can soak up oil so if you have an oily mess in the kitchen, adding some clay to the area may help clean it.

Clays are great to blend with other powders. Try <u>powdered botanicals</u> or <u>Ayurvedic herbs</u> in your mask, <u>superfood powders</u>, powder actives such as <u>vitamin C</u> or <u>niacinamide</u>, exfoliating plant flours such as <u>oat flour</u> or blend two or more clays together.

You can mix clays with anything that has water in it! So pure water, hydrosol, teas/infusions, honey, yogurt, the list goes on. If you're keen to try something different you could even blend the clay with a substance like pureed cucumber or pineapple juice which contains fruit enzymes. A homemade enzymatic facial sounds brilliant!

The pH of clays can be quite high. Bentonite is 8.5–10, so it can be a good idea to mix them with acidic substances such as <u>ACV</u> or a little lemon juice to bring down the pH to more skin friendly levels.

Don't let your clay mask dry out completely on your skin or it will suck all the moisture out of your skin too. Usually 5–10 minutes is sufficient.

Use a toner and moisturiser after masking, to rehydrate and moisturise the skin.

Adding clay to soaps makes for wonderful creamy bubbles, a more creamy feeling bar and additional nourishment.

We hope you enjoy playing with clays and using them in your products as much as we do!