

## COMMON QUESTIONS AND ANSWERS

### 1. What exactly is Glacial Bay Organic Clay and where does it come from?

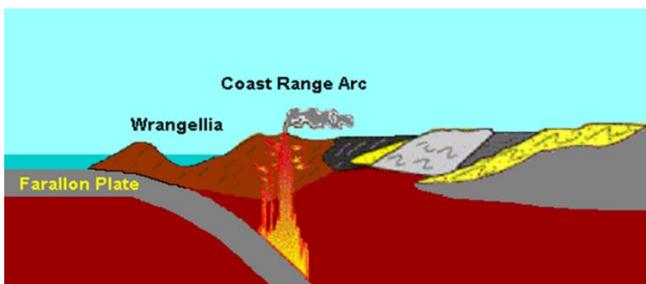
#### ***“ENGINEERED BY NATURE”***

We supply an abundantly rare, mineral rich, hand harvested, sustainable Glacial Marine clay that is produced in an environmentally friendly manner. Our pristine Sea Silt's small particle size, large surface area, unique mineral characteristics and strong cation charge produces the highest grade of consistent, long lasting therapeutic clay products in the market.

Glacial Bay Marine Clay Inc. (GBOC) is a raw material supplier who practices an environmentally friendly, sustainable process, which includes hand harvesting at low tide, solar drying in our 15,000 sq. ft. Greenhouses to a powdered form and then screened into an Ultra-fine powder with an average size of between 10-20 microns; the consistency of talcum powder or icing sugar.



Our unique and rare clay mineral deposits of glacial marine clay are unlike any other as they are situated beneath live and active glaciers and icefields, located in the Volcanic Coastal Mountain range of British Columbia, Canada.



Ancient Volcanic activity over 100 million years ago created Phyllosilicates or Sheet Silicates.  
“Forged by Fire & Tempered by Ice”

Clay minerals of our clay are composed mainly of Smectites, Vermiculites, Montmorillonites and Illites. Their chemical structure presents a 2:1 ratio of clay mineral layers allowing for the collection of binding of many minerals and micro-nutrients in its microbiome environment. The interlayers of such structure enhance a water retaining capacity with more elements and minerals and/or desirable agents inside by its swelling/shrinking process called plasticity, making clay become a reservoir of minerals and trace elements as well as other nutrients for our daily use.

Glacial run off carries vast deposits of these ultra-fine particles down the river systems to settle in estuaries at the base of the mountains, in an isolated inlet of the Pacific Ocean. Throughout the journey these clay particles are energized through hydrolysis creating a strong cation electrical charge that gives our magical glacial marine clay its powerful binding and natural healing properties.

Our glacial marine clay deposits are inter-tidal and submerged in pristine Pacific Ocean saltwater to become a fully balanced, mineral rich blend of clay. The clay “Sea Silt” deposits are refreshed with the rich marine micro-nutrients from marine phytoplankton daily, which has been proven to be extremely beneficial for skin and body care. Test results show that our clay has a neutral pH balance of between 5.8-7.2 which is desirable for many different applications.



The Clay in the spring glacial run-off turns the Ocean a turquoise blue



The Highest Peak and largest Glacier overlooks the Company's mineral claims

Glacial marine clay can only be a superior product if the region of erosion can supply large amounts of minerals and elements that are required for good health and well being. Glacial Bay Organic Clay's deposits have large amounts of these key ingredients making it one of the purest and most highly enriched clays available on the market today.

Our rare glacial marine clay deposits have been a hidden secret and only available to a select few who have mineral claims in the area. Professionals from around the world are mystified at the amazing healing and skin conditioning properties that our unique clay possesses.

Our Glacial Marine Clay is both nourishing and detoxifying when applied to the skin. This powerful combination produces skin product formulations that are highly effective, extremely stable. As a cosmetic ingredient, it can be used for skin conditioning in facial, body and hair care products including foundations, BB creams, mineral makeup, lip gloss, facial masks, antiperspirants, toners, moisturizers, and cleansers.

As well as providing a great base to stabilize cosmetic formulations, our unique clays' mineral and micro-nutrient properties have been used in applications that may be used with other active ingredients to help mitigate many skin disorders such as Eczema, Psoriasis & Acne. Used for many centuries by the local First Nations, stories passed down by elders tell of the many healing qualities this clay was used for, including cuts, burns, infections, contact dermatitis, sunburns, and reducing inflammation. Their folklore confirms that "Not all Clays are created Equal" as these indigenous people used to travel to where our mineral claims are for healing and meditation.

## **2. How is it harvested?**

Our company's policy is to be great environmental stewards of our resources, much like the First Nations who first used the area as their summer habitat. We harvest in a sustainable manner, that is friendly to the local environment while creating a carbon neutral footprint. As the clay is harvested from our own mineral claim deposits, we can control the processing of the clay from the initial harvest to the final sale in an economically sustainable way, thanks in many ways to mother nature.

Every season, as the glacial spring run off starts, 3-4 inches of this glacial clay is deposited annually in the Estuaries where are mineral claims are located. We set yearly harvest quotas in certain sections of our claims and rotate these claims over a five-year period, never harvesting in the same area twice. After a period of five years, 15-20 inches have been replenished, thus giving us one of few sustainable mineral based resources.

We harvest all of clay by hand, placing it into reusable burlap sacs, then packed 50 burlap sacs to a cubic meter tote, which is then transported to our greenhouse. We only harvest the top 12-18 inches to capture the clay with aerobic activity of the rich microbiome environment. We angle trench all the harvest holes to allow small fish or salmon fry to escape during changes in tidal action to protect the fish habitat.



Our clay is harvested in partnership with our local Indigenous First Nations as some of our proceeds go back to protect the grizzly bear habitat and fish hatcheries in our local area. The clay totes are transported back to our Processing Facility using transportation barges and trucking companies that are empty backhauling back to their original destination, to minimize our carbon footprint.



Unpacking burlap sacs      Clumps are slowly reduced to a fine powder using our propriety process

Mother nature takes over again, and the clay is solar dried inside large 15,000 sq ft greenhouses to a moisture content of below 1%, before the clay reaches our screening plant where sand, debris and organic material are screened out. The resulting clay particle size is then screened to an average size of 10-20 microns depending upon customer's requests; (the size of talcum powder or icing sugar).



Organic material, sand and larger particles are all screened out to produce an Ultra-fine Clay

### **3. What kinds of short-term benefits does the clay have on our skin?**

After just one or two applications, you will start to see differences in your skin. Circulation will improve, opening the capillaries for better circulation and the many trace elements and rich minerals in the clay will help to rejuvenate your skin. The clay will also assist in the detoxification of your skin, helping to remove impurities, bacteria and other toxins as well as balance the PH of your skin. The strong cation charge binds these toxins within the skin and removes them when the clay is washed off.

#### **Benefits: through its physical and chemical properties:**

##### **Skin looks visibly younger, revitalized, radiant & refreshed**

- 1) cleaning & removing skin debris,
- 2) Cleanses, Repairs, Hydrates and Heals dry skin while smoothing the skin
- 3) reduces the signs of aging, puffiness, age spots, & dark circles below the eyes
- 4) neutralizing and/or detoxifying skin oxidants,
- 5) desensitizing skin from allergens and enhancing skin innate immunity, and
- 6) normalizing acidic and mineral micro skin environment.
- 7) anti-inflammatory qualities to reduce swelling
- 8) removes oil and other bacteria from skin surfaces including deep clean for pores
- 9) provides trace minerals and other micro-nutrients to the skin surface
- 10) balancing the skin metabolism in a sustainable well beings

### **4. Is it safe for all skin types? What kinds of skin concerns is the clay good for?**

Our clay suits all skin types and is especially effective on oily skin. In practice, how our clay is formulated with other ingredients determines what the final product and application is most suited or manufactured for.

Our customers use our clay for various applications. They have told us how they use it in formulations to help treat Acne as it detoxifies skin, reduces bacteria in pores, and reduces inflammation & scarring.

We have customers that use it in combination with other ingredients to make the effects of Eczema, Rosacea, Shingles, Psoriasis, Hives, Contact Dermatitis, Rashes less severe, serious and painful.

Our local First Nation peoples have used the clay for many generations for its powerful healing qualities to treat cuts, burns, infections, rashes, sunburns, reducing scars and to promote faster healing and reduce inflammation.

Clay based lotion has also been beneficial for sensitive skin and skin allergies too. And we are evaluating, a clay sunscreen that may intrinsically contribute up to 10 points of SPF for skin protection from sun irritation.

Clay soap is a convenient and popular product often used for a skin friendly sanitizing.

## **5. What Inspired you to get into the Cosmetic Ingredients Industry?**

We have worked with several Indigenous First Nations over the years. While volunteering for one band, we heard about this "Healing Clay" after listening to stories from the Chief & Elders of our local First Nation. So, we followed up to find these unique, rare deposits in the Estuary at the end of this long inlet off the Pacific Coast.

We started to test these clay samples and worked with several scientists, doctors, nurses, formulators & chemists to see what positive effects our clay had on the skin. It was wonderful to find out how beneficial our clay was to assist in restoring the healthy balance of the skin ph and to see the results once applied to the skin.

So, assembled a group with the goal of bringing this "Healing" clay to market, to help others with various skin conditions. As there were costs associated with establishing/proving our claims for the healing qualities of our clay, we decided to enter the cosmetic ingredient market for clay masks and clay related products. This was done to generate funding for future testing, to prove our clay has many healing qualities. But in the meantime, people who will use our clay for products such as clay masks, will also get the added benefits of the healing qualities our clay possesses.

## **6. Is Your Ingredient Sustainable?**

Absolutely! We are fortunate that our mineral claims for our clay material is located at the base of an active Glacier that deposits about 3-4 inches of new clay silt annually. We rotate between the areas of our 10 claims (each claim is 55 acres) to ensure we do not harvest from the same area for 5 years. As we only harvest the clay from the top 12-18

inches of the surface, we allow time for each harvest to be replenished with between 15-20 inches of clay before we harvest again in the five year cycle.

## **7. What Makes Your Ingredients Unique?**

Several factors combine to give our clay its unique qualities:

First is the source of the clay, from ancient volcanic mountain ranges that produced an abundance of Montmorillonites and Illites clay. This clay is known for their high absorbency and stronger cation exchange capacities for absorbing active ingredients and binding to them to produce a more stable clay mask.

Secondly, there is an active glacier and Icefields that feed this ground up clay down long river systems and through electrolysis, our clay particles become negatively charged. This strong negative charge binds with the active ingredients of the formula to produce stable products also binds positively charged toxins such as bacteria when applied to the skin.

Third, and just as important is that our clay has a very small particle size, which translates to larger surface areas to absorb active ingredients. Fourth, our clay has anti-inflammatory properties that reduces inflammation which helps smooth wrinkles, diminishes the bags under your eyes and is even used in a suave for professional athletes for muscle aches and inflammation from injury or over-exercise.

Last is the fact that our clay is immersed in the Pacific Ocean for more than half its life, mixing with the rich micronutrients in the water to produce a microbiome environment similar to the human skin. Thus, allowing an easier transfer of active ingredients to the skin, while detoxifying the skin at the same time.