



## Ghassoul

Ghassoul is a natural, mild cleanser. Unlike soaps and shampoos Ghassoul contains no surfactants and cleanses gently by absorbing impurities and excess oil. With a pH of 6.9 – 7.5, Ghassoul is THE choice for natural and chemical-free hair and skin cleansing.

Ghassoul is an absorbent clay that dissolves in water and *plus-ionizes* its mineral content when dissolved. The ionized minerals help to fill up the NMF (Natural Moisture Factor - natural cellulite between cells) that is lost by our skin through stress and aging. Its use has a positive effect on keratin carries out recovery promotion of the damaged of horny layer.

When added to water, the ghassoul-paste is used to adsorb the oils, dead skin cells, and dirt from the surface of the skin, scalp, and hair.

Surfactants (found in both commercial and most natural shampoos and cleansers) break down the oil in the pores of your skin and force your body into a vicious, un-natural, oil-production cycle. This cleanser respects the natural, protective lipids on the skin, scalp, and hair. Likewise, it does not irritate the sebaceous glands. Ghassoul is especially recommended for use on sensitive or allergenic skin.

In addition to the oil removal characteristics, a Ghassoul facial-mask smoothes and improve skin. Clinical studies (*Structure Probe Inc.* and *International Research Services Inc.*) evaluated the effects of a Ghassoul clay mask on a variety of skin conditions.

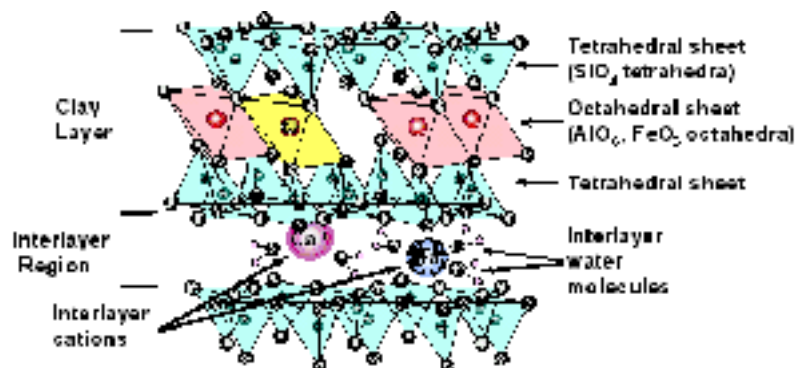
The results showed that a single use of a Ghassoul mask:

- . Reduces dryness (79%)
- . Reduces flakiness (41%)
- . Improves skin clarity (68%)
- . Improves skin elasticity / firmness (24%)
- . Improves skin texture (106%)



# Ghassoul Science

Ghassoul (pronounced *ra-ssool*) is an ancient clay, formed under the Atlas Mountains in Morocco.



Ghassoul clay is a smectic or swelling clay. Smectites are three-layer clay minerals. They consist of two layers of interconnected silica-tetrahedrons which enclose a central Metal hydroxide -octahedron layer (M=Al, Fe, Mg and others). A water layer is sandwiched between the layers. The silicate layers have a slightly negative charge. This weak charge absorbs cations such as sodium, calcium and others in the natural state.

Ghassoul clay is very rich in minerals: **magnesium, calcium, silicon, iron, potassium, and sodium**. These minerals detoxify the skin using by exchanging themselves for a variety of compounds including toxic metals and polar organic (oily) compounds.

The top structure in the illustration is repeated throughout the clay in layers. An essential characteristic of all smectite minerals is their ability to absorb tremendous amounts of water (1.66 times its weight) and other liquids into their sheet structures. This gives ghassoul clay extraordinary swelling properties. This combination of liquid and cation absorption and exchange is responsible for the unique properties of ghassoul clay.

Ghassoul contains some of earth's most necessary health elements: **magnesium, calcium, silicon, iron, potassium, and sodium**. It has the capacity of releasing all of its minerals and energizing ions richness.