

“Natural” Micas

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Trying to understand the colorants used to “beautify” bars of soap can make a person dizzy! Honestly, there are so many different choices and colorants available; it’s bewildering! However, thoroughly researching and fully understanding colorants was very important to me because it is one of the reasons I began making soap.

In 1996, I experienced a rather sudden occurrence of red spots on my face, which developed into an outbreak of tiny pustules. I knew traditional acne didn’t erupt “from zero to 60” overnight, and I convinced myself that I had contracted some sort of rare facial fungus or bacterial infection. I stopped using my newly-acquired “natural face powder,” thinking it may have contributed to the problem, and I bought a pretty, purple aromatic bar of “natural soap” in an attempt to help clear my skin. This attempt failed—terribly—in fact, my face worsened and eventually became quite painful.

Just like most people stricken with a painful mystery medical condition, I decided to skip the family doctor and headed directly to a specialist. When the dermatologist told me I was having a reaction to the “synthetic” colorants in my facial products, I was astounded. At first, I argued with the dermatologist and produced the “natural face powder” from my purse and offered to return with the label from my “natural soap,” because I was certain I was not using “synthetic” colorants. After I calmed down, the dermatologist pointed out the oxymoron, “natural micas,” on the back of my “natural face powder.” Further, he explained there is such a thing as “natural mica;” it does exist; it is an extremely expensive silicate mineral of crystalline structure that is easily broken into sheet-like flecks. However, being very expensive to mine and produce, natural micas are reserved for the electronics industry and all micas used in cosmetics have been synthetic since 1960. All micas used in cosmetics are synthetically manufactured. I was shocked. The dermatologist explained to me that most people have no reaction to very small amounts of synthetic mica used to lightly color products, ranging from 0.01% to 0.1% of the mass of the product. My skin just happened to be slightly more sensitive than average and I just happened to purchase handmade, cottage industry products that contained large quantities of synthetic micas, about 2% to 5% of the product mass.

I was livid. The ingredients list on the products had been a lie; they were not natural; they were synthetic and they were responsible for my pain and for my expensive (yet very informative) visit to the dermatologist! I went so far as to contact the woman who had made the soap and who was responsible for the fraudulent “natural soap” label. She too was quite shocked and faxed me a copy of her supplier’s invoice, which read, “Mica, natural source, purple....” My further research revealed that “mica” refers to a group of 30 different minerals, the most common are muscovite, biotite, lepidolite, and phlogopite, and that micas were not used in the cosmetic industry until after 1946, when the US government sponsored research for the synthetic production of micas. After micas were produced synthetically and became readily available, the cosmetics industry could afford to use synthetic mica as an inexpensive safe reflectant. At first, the synthetic micas were used as pearlescent-type shimmering agents in sparkling eye

shadows and frosted lipsticks. Later, as technology progressed, the synthetic micas were artificially colored to produce an inexpensive safe colorant. (The Encyclopedia Britannica and The Columbia Encyclopedia, Sixth Edition.) Today, the McGraw-Hill Encyclopedia of Science & Technology defines “cosmetic mica” as “*a synthetic fluorphlogopite mica made artificially by heating a large batch of raw material in an electric resistance furnace and allowing the mica to crystallize from the melt during controlled slow cooling.*”

My skin is still sensitive to synthetic cosmetic micas in any concentration. I diligently read labels to completely avoid using anything with micas. As for the woman who made the aromatic purple soap, she continues to use purple mica in smaller amounts and she changed her label marketing from “natural soap” to “handmade soap.” We remain acquaintances and share soap secrets to this day.

Please, refer to the related article, “Understanding Colorants.”

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