

Make up and microbes

“What is essential is invisible to the eye...” – antoine de saint

Microbes are found far and wide, even where we have never thought of. Once they get entered, they live happily ever after instead of being criminals. Yes, these microbes are also present in your daily use cosmetics. Microorganisms can definitely cause spoilage or the chemical changes in cosmetic products that can also result to the physical injury of the user. Unwarranted amounts of bacteria and fungus can affect the cosmetic in several manners like, odors, destabilize the emulsion and color changes. These microbes can affect the consumer in many unwanted ways likely from harmless itching of the skin to the severe infections; even can lead to the permanent or temporary blindness because of the products that include eye make-up. All the cosmetic products that contain water or watery substances for instance; aloe, hydrosols, water based extracts, etc. require a preservative to prevent microorganisms from growing into the makeup kits. These entire make up products should be tested to assure that they are free or relatively free of such microbes. Products that do not have preservatives will sooner or later become the favorite place of microbes to grow just as foodstuff and could become unsafe though harmful for the user. The most common microbiology tests for cosmetics are the Aerobic Plate Count and fungal/yeast test. One most important thing to remember is that Cosmetic products can never be expected as aseptic, in whatever manner or way, they must be completely free of highly-virulence pathogens and the total number of aerobic microorganisms/gram must be very low. These Pathogens or opportunistic pathogens whose incidence would be of chance, especially in eye-area cosmetic products, include *Staphylococcus aureus*, *Streptococcus pyogenes*, *Pseudomonas aeruginosa* and some other species too, and *Klebsiella pneumoniae*. Quite interestingly some of the normal microbial flora that is regarded as nonpathogenic may be opportunistically pathogenic. These can be present in wounds and injuries.¹

From where these microbes come from?

During the production of these cosmetic products. The frequent sources of microbial contamination are raw materials and substances, equipment and tools, as well as microbial contaminated air. Water used for batch-making can always be the titan threat to the product sterility. Even with safe sanitation practices, cosmetics must be preserved to cope up with the contamination encountered during production, packaging, and normal usage by the consumer.²

What should the user do?

Avoid sharing your cosmetics because what actually you are sharing is germs. Evade adding water or saliva to your cosmetics, like

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mascara because in actual you are adding microorganisms into it or also diluting the preservatives.^{3,4} Proper storage of cosmetics, don't keep them in too warm because many of the microorganisms may grow faster and preservatives may also be broken down. Keep the storage place clean and remember practicing hygienic practices before applying for instance, washing your hands. Microbial contamination is an alarming time for your physical beauty. So, be vigilant.

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