Purchasing a Proper Respirator for use with Clays and Glazes

Avoid Respirators with Organic Cartridges Unless You Need Them

For almost all clay studio use, you need a respirator to protect from dust, because that is by far the number one hazard in the clay studio. That is your priority. Avoid the respirators available at hardware stores and home improvement centers that have organic chemical cartridges intended for spraying pesticides/herbicides or paints and varnishes containing volatile solvents. For reasons explained below, don't ever purchase such a respirator unless you need it for those purposes. Also, such respirators usually in one-size-fits-all that often doesn't really fit your face. A respirator equipped with organic cartridges is of no use to us unless the cartridges also have a P-100 HEPA rating or have additional P-100 dust filters attached. Also, be aware that all respirators equipped with organic vapor cartridges must be stored in a sealed plastic bag when not in use. If left out, the cartridges are constantly absorbing minute amounts of organic vapors from the atmosphere and will quickly exhaust their usefulness and at least partially block the flow of air. This is a real problem, because people run the risk of assuming they are being protected from organic vapors when the organic cartridges are already spent.

Avoid Disposable Paper Dust Masks

Avoid disposable paper dust masks except in an emergency when nothing else is available. Disposable paper masks do not seal properly against your face and do not really filter out the most dangerous ultrafine silica particles. Those particles cannot be expelled by even a healthy lung, and the body responds by building nodules of scar tissue around the sharp silica particles. The eventual outcome of that is silicosis, which is irreversible and usual fatal.

What Kind of Respirator to Get?

Always purchase a twin-element *half-mask* or *half-facepiece* respirator with a resilient rubber face piece that fits your face. It must be equipped with *P-100 HEPA* (high-efficiency particulate air) dust filter designed to protect you from very fine dust. *Half-mask* means that it covers your mouth and nose, but not your eyes, as compared to a full-mask respirator with oxygen supply such as firefighters use.

Got to amazon.com and enter "3M Half Facepiece Respirator" in the search box and look for the ones with the flat pink filters. This is a very good general-purpose dust mask with replaceable twin-element P-100 filters, and is very reasonably priced. If you search the options you'll see that it comes in small, medium, and large, so get the size appropriate for your face. For more specialized respirators such as hypoallergenic silicone rubber, go to www.lss.com (Lab Safety Supply) for an extensive assortment of high-quality half-mask respirators. You'll pay a lot more at Lab Safety Supply, especially since the mask and the cartridges or filters are sold separately.