

There is No Single Respirator That Will Work for Every Hazard

There is not a magic bullet in respirators that you can use to cover all the different hazards that you might be exposed to (unless you are willing to always use supplied air!). So here are some of the common hazards you may come across and the most commonly recommended respirators for these hazards:

Painting

If you are painting with a brush or roller, an organic vapor cartridge is all that is normally needed. However, if you are spray painting, then an N95 or P95 filter should be added to the organic vapor cartridge. If isocyanates are present in the paint, understand that supplied air might be required.

Pesticides

As with paint spraying, an organic vapor with an N95 or P95 pre-filter is commonly needed when spraying pesticides. If only mixing pesticides, you technically do not need a pre-filter.

Staining/Varnishing

This would normally involve an organic vapor cartridge; however, if the product is sprayed on, an N95 or P95 filter should be added. Again, you will need to check on the presence of oil.

Lacquer Thinners

This is one of those vague terms that we need more information on to determine the necessary respirator. Chances are we would recommend an organic vapor cartridge, however, if we know the ingredients of the thinner, we can easily find them in the 3M guide book. If spraying the lacquer thinner, an N95 or P95 prefilter should be included.

Asbestos

The minimum protection for asbestos fibers is a P100 filter. Nevertheless, OSHA only allows a half-mask respirator as the minimum protection, not a disposable respirator. Many contractors are using PAPR's for asbestos abatement projects.

Sandblasting

A customer may tell you that the contaminant of concern when sandblasting is silica dust. For this contaminant, a N95 filter is acceptable (even though P100s are the safer option).

Welding

The key term associated with welding is fume. Metal fumes emitted during welding are basically airborne particulates formed by the evaporation of solid materials. An N95 can properly block out many of these fumes. We sell many varieties of disposable welding respirators; however, remember that a P100 will also adequately block out welding fumes, and actually perform better. If Hexavalent Chromium is present, a P100 filter is minimum.

Cigarette Smoke

For light exposure to cigarette smoke, it's suggested to use a disposable N95 or P95 respirator with nuisance level organic vapor relief. This would provide some temporary relief from cigarette smoke, without being overly obtrusive. For better protection from the particulates, a P100 could also be used on a half-mask.

Asthma/Allergies

Our Safety Services Team can assist with guidance in this area, but we are not trained health specialists and are in no position to recommend respiratory protection to workers with occupational asthma or those with allergies.

Mold

Due to the larger particle size of mold spores, a simple N95 respirator will properly block this contaminant out at lower exposure levels. The EPA encourages the use of a P100 on a half-mask or full face respirator for bigger areas involving mold.

Tuberculosis (TB)

Any NIOSH approved filter from an N95 through a P100 are currently approved for protection against TB. Most hospitals require a disposable respirator that meets CDC guidelines. This type of respirator has a liquid-proof barrier.

Formaldehyde

It's suggested to use a formaldehyde cartridge; however, not every manufacturer has a cartridge specifically for formaldehyde.

Of course there are many other respiratory hazards out there that will need protection, please contact Safety Services and let us know what they are and we can give choices to consider. We typically like to know more about your specific situation before making any generalizations (it's good for us to understand exposure levels and more specifics about the exact chemical names).

03/22/16