

Respiratory Protection Facts

Contaminant and Hazard Types

Particulates are tiny pieces of matter. Either “dust”, which is a dry particle or a “mist” which is in liquid form. Particulates can irritate the respiratory system and cause irritability.

Vapors can't be seen but they can be very dangerous when inhaled. It can damage your respiratory system as well as other organs.

Gases can't be seen and may be odorless, but they are in the air around us.

Fumes are created from burning or liquifying a solid material. Like other contaminants, fumes can't be seen by the naked eye and can cause damage, so respiratory protection is necessary.

Respirator Styles

Self-Contained Breathing Apparatus —

SCBA designed to let users transport their own air supply. The SCBA is excellent for oxygen deficient areas that take place in confined environments.



Reusable (Air Purifying) Respirators —

Suitable for negative or positive pressures uses. Offers comfort, versatility and long life. Replacement parts are usually available. Use filters and/or cartridges.



Powered (Air Purifying) Respirators —

PAPR battery powered units that deliver a continuous flow of filtered air. Available with many options ranging from facepieces, helmets to hoods.



Maintenance-Free (Air Purifying) Respirators —

Already assembled with a variety of chemical and gas cartridges. Economically priced and can be disposable.



Disposable (Air Purifying) Respirators —

Economical, comfortable and lightweight. Available in a variety of technologies and features.



Low-Maintenance (Air Purifying) Respirators —

Provide the ability to interchange cartridges, prefilters and filters. Economical protection with the flexibility of reusable respirators.



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Filter Classification

N Series Filters are those restricted to use in environments free of oil aerosols. Can be used for any solid or liquid airborne particulate hazards that does not contain oil.

N95 Particulate Filters are at least 95% filter efficient when tested with -0.3um NaCl aerosol.

N99 Particulate Filters are at least 99% filter efficient when tested with -0.3um NaCl aerosol.

N100 Particulate Filters are at least 99.97% filter efficient when tested with -0.3um NaCl aerosol.

R Series Filters are intended for removal of any particulate including oil based liquid aerosol.

R95 Particulate Filters are at least 95% filter efficient when tested with -0.3um DOP (Diocetyl Phthalate) aerosol.














P Series Filters are intended for removal of any particulate including oil based liquid aerosols. They may be used for any solid or liquid particulate airborne hazards. Filters should not be used for more than 40 hours or 30 days, whichever occurs first.

P95 Particulate Filters are at least 95% filter efficient when tested with -0.3um DOP (Diocetyl Phthalate) aerosol.

P100 Particulate Filters are at least 99.97% filter efficient when tested with -0.3um DOP (Diocetyl Phthalate) aerosol.

NIOSH 42CFR84: Particulate Respirator Filter Definitions

Filter Series	Filter Designation	Min. Efficiency
N (Non-Oil)	N100	99.97%
N99		99%
N95		95%
R (Oil-Resistant)	R100	99.97%
R99		99%
R95		95%
P (Oil-Proof)	P100	99.97%
P99		99%
P95		95%

	Organic Vapor
	Acid Gas
	Organic Vapor/Acid Gas
	Ammonia/Methylamine
	Organic Vapor/Formaldehyde
	Multi Gas
	Mercury Vapor/Chlorine Gas
	Organic Vapor P100
	Acid Gas/P100
	P100/Organic Vapor/Acid Gas
	P100/Ammonia Methylamine
	P100/Multi Gas
	P100/Mercury Vapor/Chlorine Gas