



HOW TO CHOOSE THE RIGHT RESPIRATOR?

In many working environments, respiratory protection is very significant. Workers are exposed anytime to several harmful contaminants and airborne toxins which can gravely affect one's health. Comprehensive and effective respiratory protections are vital to prevent health hazards. The use of incorrect respiratory protective method can cause considerable health risks and diseases.



Four (4) STEPS in choosing your respirator

- 1 Identify the contaminants
- 2 Test the environment
- 3 Choose a level of Protection
- 4 Size your respirator

Different Contaminants:

- **GASES** - are substances which at an ambient temperature and pressure are in a liquid or solid state and pass to a gaseous state through boiling or evaporation processes (examples of gas are oxygen, nitrogen, carbon dioxide).
- **VAPORS** - are substances which at an ambient temperature and pressure become gaseous through evaporation from a liquid or a solid (examples of vapors are ketone, toluene and hexane). For protection against this type of contaminant it requires a carbon layer filter suitably treated to selectively absorb different substances.

- **MISTS** - are tiny droplets that are formed from liquid materials through condensation and atomization processes.
- **FUMES** - are formed when a solid material is vaporized through high temperature. The vapor cools quickly and condenses into extremely fine particles.
- **DUSTS** - are formed when a solid material is decomposed into tiny fragments.

SELECTING THE RIGHT PROTECTION CLASS

To select the right protection against gases and vapors the chemical nature of the pollutant must be known. Be sure to consider the following in selecting the right respiratory protection for the job:

- Identify the respiratory hazards present in your workplace.
- Evaluate the hazards that you have identified.
- Conduct testing on the workers to determine if they fit to wear respirators.

Refer on the below tables to indicate which type of filter to use depending on the contaminant and its concentration, making sure the oxygen level is greater than 17%.

CLASS	1	2	3
CAPACITY	LOW	MEDIUM	HIGH
EXPOSURE LIMIT	1000 ppm	5000 ppm	10000 ppm