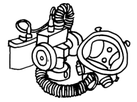
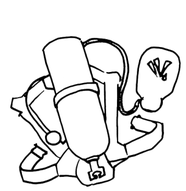
WorkSafe
Travail sécuritaire NB

Personal Protective Equipment

Respirator Selection Guide

			Types of Respirators										
			Air Purifying									Air Supplying	
			Disposable	Reusable Half-face and Full-face					Powered Air Purifying Respirator (PAPR)			Airline (5)	Self-contained Breathing Apparatus (SCBA)
													
	Activities/Contaminants	Hazards	Efficiency (%)			Chemical cartridges	Particulate cartridges efficiency (%)			Chemical cartridges	Particulate cartridges efficiency (%)		
			95	99	100		95	99	100		100		
Particulates	Grinding, sanding, woodworking, general dust, ...	Low hazard particulates	✓(1)	✓(1)			✓(1)	✓(1)					
	Lead, cadmium, arsenic, ...	High hazard particulates			✓(1)				✓(1)				
	Asbestos removal (7)	Class 1			✓(1)				✓(1)				
		Class 2							✓(1)				
		Class 3									✓(1)	✓	
	Welding, cutting, brazing	Welding fumes	✓	✓	✓		✓	✓	✓				
	Microbials removal (4)	Mould and bacteria	✓	✓	✓		✓(3)	✓(3)	✓(3)		✓(3)		
Gases and Vapours	Solvent, organic vapour, paint, thinners, Formaldehyde, ... (8)	Chemical contaminants				✓(2)				✓(2)		✓	
	Ammonia, acid gases, ...	Chemicals irritating to the eyes				✓(9)						✓	✓
	Autobody paint	Isocyanate paints										✓	
	Confined space rescue or areas where the contaminants have not been measured	Unknown concentration of contaminants or immediately dangerous to life and health atmosphere										✓(6)	✓

All respirators must be approved by the National Institute for Occupational Safety and Health or an equivalent.

This chart is to be used as a guide and represents the most common applications where respirators are used. The respirators that are selected may vary depending on the work conditions. Respirators should only be used where engineering controls are not possible or have failed to adequately reduce worker exposure to contaminants. The airborne contaminants must be identified and measured before selecting the best respirator.

1 Respirators are available in the N, R or P classes. N means no oil mist resistance, R means some oil resistance, and P means oil mist resistant.
2 Chemical cartridges may be fitted with dust pre-filters when particulates are present.
3 Acid gas cartridges may be used in addition to particulate cartridges, if a bleach is used as a disinfectant.
4 The required protection depends on the extent of the contamination and the nature of the abatement project.
5 Airline systems' air quality has to be tested every 6 months to ensure it meets CSA Standard CAN3-Z180.1.
6 Requires an emergency escape cylinder.
7 As described by the Code of Practice "A Code of Practice for Working with Materials Containing Asbestos in New Brunswick."
8 The required cartridges will differ depending on the airborne contaminants.
9 A full-face respirator is required at high concentrations.

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