Personal Protective Equipment (PPE)

Personal protective equipment (PPE) is equipment or clothing worn to minimize exposure to chemical hazards in the workplace.

PPE does not remove or reduce workplace hazards and does not replace effective engineering or administrative control methods such as substitution or ventilation. PPE is the last line of defense when the hazard cannot be removed or controlled adequately. Proper selection, use and care of the equipment are vital to provide the proper level of protection.

Selecting, Using, and Maintaining PPE

Employers are responsible for selecting, providing and fitting of appropriate PPE for the hazardous exposures in the workplace. Consult the Material Safety Data Sheet (MSDS) for advice. Consider how the materials will be used, the quantity used, and the types and duration of exposure. Ensure that there will be an adequate margin of protection in case of a spill or other emergency.

Ensure that the PPE provides a good fit. The PPE should not impair dexterity or flexibility or create safety issues such as entrapment.

Proper maintenance is essential. Follow the PPE manufacturer's recommended procedures for cleaning and storage.

Training

Employers must ensure that employees are trained to properly use, maintain and store PPE. Employees also must:

HAVE training with "hands on" instruction in the fit, use and maintenance of assigned PPE.

UNDERSTAND the limitations of the PPE and know what to do in the event of exposure or device failure (e.g. how to use emergency showers, eyewash stations, first aid).

UNDERSTAND when to discard/replace PPE (e.g. end of shift, every hour).

REPORT any missing or defective devices to the supervisor.

Skin Protection

Many kinds of protective gloves and clothing are available, including aprons, full body suits and boots. Gloves and clothing may be manufactured from many different materials

such as latex, rubber, VitonTM and Tychem[®]TK. No one material can protect from all chemical hazards. Contact the product manufacturer or supplier or a PPE supplier to find out which specific protective materials are best for the chemicals with which you are working.

Also consider issues such as temperature conditions or the need to protect against punctures, tears and abrasion.

Eye/Face Protection

Eye and face protection must be used if there is a possibility of injury from hazards such as airborne particles or splashes of toxic or corrosive liquids.

Different types of eye and face protection are available, including safety glasses, chemical splash goggles and face shields, or combinations of these.

Safety glasses and/or goggles are always worn when working with hazardous chemicals. A face shield may be required (over the eye protection) when there is a risk of splashing, leaks or dangerous reactions. In general, contact lenses can be worn under appropriate eye protection.

Respiratory Protection

Respiratory protection is needed when airborne chemicals cannot be controlled below occupational exposure limits. There are two main types of respirators:

- Air-purifying respirators use filters or cartridges to remove contaminants. Various types of filters and cartridges are effective against different classes of chemicals.
- 2) Supplied air respirators provide clean air for breathing. This type is used when air is oxygen-deficient, heavily contaminated or of unknown condition.

MSDSs cannot provide detailed and complete respiratory protection guidelines. Selection of respiratory PPE must be done by a qualified person who has assessed the work situation.

If respirators are used in the workplace, a complete Respiratory Protection Program must be put into place.

Plan and prepare for emergencies...

Train employees on the emergency plan and practice it.

For additional information and resources, visit www.whmis.gc.ca and/or www.ccohs.ca





