

IMPORTANT HSE TOPICS

SKIN CONTACT

Who Should Use?

- » Chemical resistant personal protective equipment (PPE) should be worn when handling, hazardous materials, toxic chemicals or corrosive materials.

It is a control measure of last resort and should always be used in conjunction with other measures. If protective clothing is used incorrectly, or badly maintained, the wearer may not be protected.

Selection

- » You may need expert advice from your PPE supplier or manufacturer, or from a health and safety professional. No materials offer protection against all chemicals. Any chemical will break through protective materials over a period of time. The build-up of contamination on PPE makes skin contact more likely.
- » Incorrect selection or misuse can lead to skin disease including dermatitis, burns or serious ill health, and waste your money.

Planning and Preparation

- » The PPE chosen must be compatible with other PPE that is needed, such as respiratory protective equipment (RPE), hard hat or ear muffs.
- » Continued effectiveness depends on proper training in use, cleaning and maintenance, and having good working practices.
- » Ask your PPE supplier/manufacturer or a health and safety professional how often the PPE needs to be changed. Make sure that the equipment is changed when necessary.
- » Caution: PPE may reduce mobility, limit communication and increase heat stress.

What needs protecting - what skin is likely to be exposed?

The four most common forms of protective clothing are:

- » hands and forearms - chemical protective gloves (GS Gloves);
- » head and body - hooded coveralls or overalls, aprons;
- » face and eyes - face visors, goggles; and
- » feet, lower legs - protective footwear

Coveralls

- » Tell workers to wear clothing under approved fire resistant coveralls (GS Flame Resistant Clothing). Two layers of clothing reduce the amount that gets through to the skin. Air impermeable coveralls can give high levels of chemical protection, but can draw dusts and mists inside the clothing at neck, arm and ankle.
- » Use, clean and maintain coveralls in accordance with the manufacturer's Instruction. Throw away disposable coveralls, as hazardous waste, at the end of the shift or particular job.
- » Use a contract laundry or a suitable equivalent to wash protective clothing.

Eye and face protection

- » CSA (Z93-07) approved eye and face protection may be needed for protection against impact, dusts, mist, gases and vapours as well as chemical splashes. Seek expert advice from your PPE supplier or manufacturer, or a health and safety professional.
- » If workers wear a full-face respirator that also provides eye and face protection, ensure that this is included in the manufacturing standard.



Protective footwear

- » Use CSA (Z 195-09) approved protective footwear against safety hazards, e.g., static, crushing, heat, and spike-penetration. There are at present no standards for chemical protective footwear.
- » Some chemicals penetrate leather very easily. Tell your supplier what chemicals you are using. Wear chemical resistant boots if chemicals or products could come into contact with the lower leg or drop into shoes.

Training and supervision

- » Train workers how to keep exposures low, how to use the PPE, and what to do if something goes wrong.
- » Provide facilities to keep clean clothing and dirty work clothing apart. Check that workers use, clean and store their PPE properly.

Employer responsibilities

- » Gather and provide safety data sheets on the chemicals that will be present at the workplace
- » Consider elimination or substitution for a less hazardous substance (e.g., a drilling or well servicing fluid that is water based)
- » Use the Controlling Chemical Hazards guideline and web project to define the proper chemical management for the work you wish completed.

Supervisor responsibilities

- » Ensure the availability of the required Guidance Sheets for chemical management.
- » Designate an area for putting on and taking off chemical protective clothing. Clean this area regularly.
- » Provide training on how to take off or put on contaminated clothing safely.
- » Ensure the availability of appropriate clothing in all sizes.

Worker responsibilities

- » Where possible, wipe clothing clean before taking them off;
- » Only use 'single use' clothing once;
- » Store clean gloves in a place free from contamination;
- » Wash their hands after taking off protective clothing; and
- » Dispose of contaminated clothing safely as hazardous waste.

EMPLOYEE CHECKLIST

- Check the equipment for damage both before and after use.
- Clean reusable PPE after every use in accordance with manufacturer's instructions.
- Never wash chemically contaminated PPE at home.
- Use disposable PPE once only. Throw it away after use.
- Change reusable overalls regularly – at least once a week.
- Store PPE in a clean cupboard or locker.
- Avoid contaminating the skin when taking off protective clothing and footwear.
- Try not to spread chemical contamination around.
- Never use compressed air to remove dust from PPE.