

<b>ILO TOOLKIT CONTROL SHEET SK100</b>	<b>CHEMICALS CAUSING HARM VIA SKIN OR EYES</b>
<b>GENERAL ADVICE</b>	

## Scope

This control sheet is part of the ILO Chemical Control Toolkit and should be used when the toolkit identifies the need for skin protection. This sheet gives general advice on how to eliminate or minimise the amount of material getting on the skin (Group S chemicals) and how to select suitable personal protective equipment.

## Contact with skin and eyes

Group S covers substances that can damage the skin and/or eyes, or enter the body through the skin and cause harm. This may be in addition to causing harm by being breathed in. Contact with skin and eyes can be a particularly problematic type of exposure, and controls in addition to those in control sheets in the 100, 200 and 300 series may be needed.

You need to consider how group S chemicals can come into contact with the skin and eyes. This can occur:

- When the skin comes into direct contact with a liquid or solid, e.g. by immersion;
- When dust or vapours/spray particles settle on the skin. The dust or vapour may be generated as part of the work activity or may be incidental to it.
- By touching dirty surfaces;
- By touching or removing dirty clothing;
- By splashing or swallowing.
- Once contamination has got onto the hands, it may be spread to other parts of the body by rubbing or scratching.

## Control measures

If you are using a chemical in hazard group S and it is likely to get onto your worker's skin or eyes, you need to consider not using it, or replacing it with one that does not fall into group S. But remember to check any replacement substance is not in a higher inhalation hazard group.

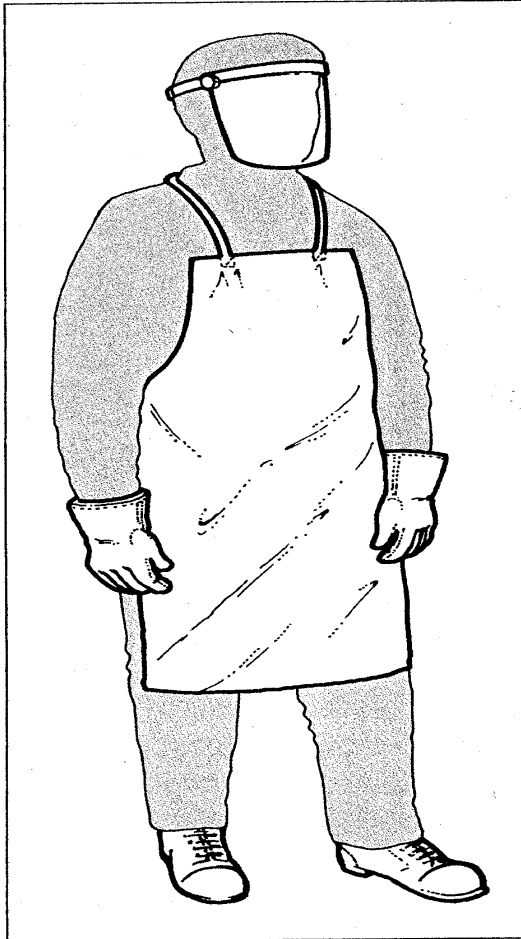
If you can't avoid exposure this way, by substitution, you will need to reduce likely contact with the skin or eyes. There is a range of options you can use:

- Can the substance be contained more? For example, a control approach 2 solution will provide more containment and less exposure than a control approach 1 solution.
- Can you modify the process to minimise handling operations or use remote handling?
- Can you segregate clean and dirty areas, and put a barrier between them? This will help to stop the spread of contamination.

- Can you provide smooth, impermeable surfaces that are easy to clean?

Once these questions have been answered and any process modifications made, it is important that the work area is cleaned regularly, and rigorous procedures are put in place to deal with spillages. Good washing facilities also need to be provided. Workers should wash their hands before and after eating, drinking and using the lavatory.

## Personal protective equipment (PPE)



In situations where contact with chemicals in hazard group S is unavoidable, the use of personal protective equipment may be appropriate. However, PPE has a number of limitations:

- It has to be selected carefully – see below.
- It may limit mobility or communication;
- Its continued effectiveness depends on proper maintenance, training and adherence to good working practices.

**It should only be considered if other measures are impracticable.**

### *Types of PPE*

There are five types of clothing that may be required:

- Chemical protective gloves;
- Coveralls;
- Protective footwear;

- Face or eye shields;
- Respiratory protective equipment (RPE)

Your protective equipment supplier should normally be able to tell you the type of protective material to select. Not all materials give protection against all chemicals. Some chemicals pass through protective materials over a period of time. It is important that you also ask your supplier how frequently the protective equipment needs to be changed. Ensure that the equipment is changed when necessary. Remember to train your workers and make sure they follow the instructions.

## General precautions

- Check protective equipment for damage both before and after use.

- Clean and maintain all personal protective equipment regularly. Use disposable protective equipment only once and dispose of it safely after use. Wash cotton type overalls on a regular basis. Wash overalls at work or at a specialist laundry. They should not be taken home and washed with the 'family' wash.
- Store protective clothing in a clean cupboard or locker. Store clean and dirty clothing separately.
- Provide a good standard of personal washing facilities.

### ***Chemical protective gloves***

- The gloves must be sufficiently robust not to tear or cut while undertaking the work activity.
- Leather or stitched working gloves are not suitable for working with chemicals.
- Make sure workers don't touch the outside of a contaminated glove with a naked hand when putting gloves on or taking gloves off.

### ***Coveralls***

- The material selected should be resistant to the penetration of liquids, dusts or granules as appropriate.
- For corrosive materials such as acids, an impervious apron gives good protection.
- Coveralls should normally be worn over boots rather than be tucked in. Gloves should normally be worn over the sleeves to help stop contamination getting on the inside of the PPE.

### ***Protective footwear***

- Protective footwear may be necessary for safety reasons as well as for protection against chemicals. Toe cap protection, heat protection and a metal sole plate may be needed.
- Ensure protective footwear complies with the appropriate EC Standard. When there is a risk of liquid coming into contact with the lower leg, long rubber boots should be worn.

### ***Eye and face protection***

- When handling open containers of corrosive liquids, full-face shields should be worn.
- Chemical splash goggles may be more practicable when wearing a respirator.

### ***Respiratory protective equipment (RPE)***

- The selection of respiratory protective equipment needs careful attention – **see control sheet S101** for further information.