



CHEMICAL CLEANERS

HEALTH EFFECTS

1. Chemical cleaners used in the construction industry can cause serious ill-health, mainly by: -
 - a. Skin contact - the acids and alkalis are highly corrosive and destructive to body tissue, causing burns which are slow to heal.
 - b. Inhaling fumes or mist - concentrated solutions of acids and alkalis emit toxic and corrosive fumes. Spray application will produce a mist, which may also be toxic and corrosive.
2. Concentrated solutions from which the dilute working solutions are made up, pose the greatest risk, but even dilute solutions can be harmful.

CONTROLLING EXPOSURE

1. Working with chemical cleaners is subject to the COSHH Regulations, which require an employer to assess the health risk and prevent or control it. Manufacturers and suppliers have a legal duty to provide all relevant information on risks and precautions. Read all COSHH assessments provided for all hazardous chemicals and substances used on site.
2. If you have to handle and dilute concentrated acids or alkalis, dilution should take place off-site under controlled conditions.
3. When diluting, always add acid or alkali to water, never water to acid or alkali.
4. The transfer of dilute material must be in sealed, labelled, containers.



5. If dilution on site cannot be avoided, it should always be done at ground level under controlled conditions, and not, for example, on scaffolding.
6. Avoid spray application. Apply with a brush or roller fitted with a splash -guard.
7. Wear protective clothing to protect your skin, face and body.
8. You will need: -
 - a. Safety goggles which provide chemical protection
 - b. Acid/alkaline resistant, non-latex Gauntlet gloves
 - c. Protective, chemical-proof and waterproof boots
 - d. Protective overalls, and when handling concentrated acids or alkalis, a protective apron (to below top of boots)
 - e. Approved respiratory protection may be necessary when handling concentrated acids or alkalis, or cleaning by spraying, or in confined areas
9. Your employer must: -
 - a. Ensure that you are provided with appropriate protective equipment and instruct you in their use
 - b. Ensure that you are using the PPE correctly

HYGIENE

1. Ensure that protective equipment is thoroughly cleaned with water after use and check for any deterioration, such as pin-holes or cuts in gloves, especially the finger tips.
2. Heavily contaminated clothing should be removed immediately.
3. Do not take contaminated clothing home – your employer will arrange to have it laundered.



4. Clothing contaminated with Hydrofluoric (HF) or other concentrated acids should be neutralised with sodium bicarbonate solution before washing. The solution must be kept readily available if HF is being used.
5. Personal hygiene is most important. You should avoid contact with contaminated equipment, clothing, or surfaces.
6. Do not raise face protection with soiled gloves – facial burns can result.
7. Wash hands and face at the end of each job and before eating, drinking and smoking, and before using the toilet.
8. Shower before going home.

PROTECTING THE PUBLIC

1. In appropriate cases check that all windows and doors in facades to be cleared are closed.
2. Avoid applying or rinsing with a spray, or working in windy conditions which could cause droplets to be carried by the wind.
3. Ensure that pedestrian barriers and warning signs are properly maintained.
4. Drainage gullies should be covered or fenced off.
5. Scaffolding must be close-boarded and sheeted to contain splashes.
6. Open ends of scaffold tubes should be capped.
7. Do not allow over-spilt liquid to flow on the pavement.



AFTER TREATMENT

1. Scaffold tubes, fittings and boards must be washed thoroughly with clean water.
2. Thoroughly clean all equipment and examine for signs of deterioration.



SPILLAGES

1. Dilute spillages of acids or alkalis with water unless HF or concentrated acids are involved. In this case neutralise with slaked lime.
2. Tools and equipment, which may be contaminated, should be treated similarly.
3. Contaminated porous material such as wood or packing should be suitably disposed of, consult your supervisor first.
4. Ensure a suitable spill kit, including absorbent materials.

FIRST-AID

1. Anyone appearing to be affected by a chemical cleaner must be taken at once into fresh air, given first-aid, and referred to medical care.
2. In most cases, first-aid will involve drenching the affected parts with plenty of cool clean water.
3. However HF burns require special treatment and first-aiders must be specially trained.
4. For any serious injury or illness, phone 999 immediately to seek medical help.

FINALLY

1. Always follow instructions.
2. Always use the protective equipment provided, and as instructed. Do not abuse it or misuse it. Maintain it as necessary.



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3. Report any defect in the equipment or the system of work without delay, and stop work immediately.