



TECH GUIDE: Preventing Skin Hazards When Working With Portland Cement

What are the Hazards of Working w



Wet portland cement is caustic, abrasive, and absorbs moisture. In addition, it contains trace quantities of hexavalent chromium, a chemical that is toxic to the skin and human immune system. Workers who are exposed to wet portland cement may develop skin disorders ranging from simple rashes to severe and long term allergic responses.

How can I Protect Myself From Portland Cement Skin Disorders?



Always wear protective gloves when working with portland cement. Gloves should cover the forearm above the wrist, and should have an outer coating of butyl rubber or vinyl. Avoid any gloves, such as cotton or leather, that allow moisture to penetrate. Ensure that cement does not accumulate inside the gloves. If possible, tape the joint between the shirt sleeve and the glove. When removing gloves, rinse off excess cement and remove gloves by the fingertips in a manner that does not bring wet cement into contact with skin. Discard worn out or damaged gloves.



When working with wet concrete, sturdy, puncture resistant rubber boots that cover the ankles and lower legs should be worn. Avoid any foot wear that allows moisture to penetrate. Ensure that cement dust does not enter over the tops of the boots. Remove any boot that is damaged or which has interior contamination with cement. Wash any contaminated skin, and exchange the boot for a clean and dry replacement.



The caustic (high pH) nature of cement dust can cause a variety of problems to the eyes, ranging from minor irritation to blindness. Always use approved safety glasses with side shields, or safety goggles, when working with concrete and cement dust. If a splash to the eyes occurs, flush the eyes for 15 minutes, then seek immediate medical attention.



Wash hands with clean water and soap if they come in contact with wet cement or cement dust. Use a washing soap that has a neutral to slightly acidic pH, to counteract the caustic pH of the cement. Do not clean with abrasive soaps, or with products such as alcohol based waterless cleansers. Wash and dry hands before putting on gloves, and after taking them off.



Seek medical attention if you have a skin problem related to portland cement exposure, even if it appears to be only a persistent minor rash. Make sure to inform the physician that you have been working with portland cement.