

# **CEMENT BURN WARNING!**





#### **EXPOSURE TO WET CONCRETE CAN LEAD TO SERIOUS INJURIES!**

Working with concrete without proper use of the appropriate Personal Protective Equipment (PPE) can damage the skin. "Cement burns" range from minor redness or irritation to serious chemical burns.



## **ALKALI BURNS FROM WET CEMENT**

When water is added Portland cement, calcium hydroxide is formed. This wet cement is caustic, i.e. a pH as high as 12.9 and can produce third-degree alkali burns after 2 hours of contact. Unlike professional cement workers, inexperienced finishers are usually not aware of the danger and may stand or kneel in the wet cement for long periods. As illustrated in a case report, general physicians may not recognize the seriousness of the injury in its early stages or the significance of a history of prolonged contact with wet cement. All people working with wet cement should be warned about its dangers and advised to immediately wash and dry their skin if contact does occur.

## **PERSONAL PROTECTIVE EQUIPMENT (PPE)**

The best way to prevent cement-related skin problems, is to minimize contact with wet Portland cement. Compliance with OSHA's requirements for provision of PPE, washing facilities, hazard communication and safety training, along with the good skin hygiene and work practices listed below, will aid in protecting against hazardous contact with wet cement.

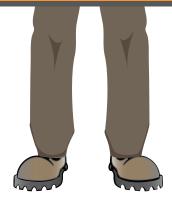
- Anyone who may come into contact with wet Portland cement should wear proper gloves. Consult with the glove supplier or the cement manufacturer's SDS for help in choosing the proper gloves. Butyl or nitrile gloves, rather than cotton or leather gloves, are frequently recommended for caustic materials such as Portland cement.
- Use only well-fitting gloves. Loose-fitting gloves can let wet cement in. Often the use of improper gloves and clothing makes the exposure worse when wet cement gets inside or soaks through the garment. Use glove liners for added comfort.
- Wash and thoroughly dry hands before putting on gloves. Wash and dry your hands every time that you remove your gloves.
- · Follow proper procedures for removing gloves, whether reusing or disposing.
- To prevent wet cement from coming in contact with your skin, protect your arms and hands by wearing rubber gloves duct taped to a long sleeved shirt and your legs by wearing rubber boots duct taped to long pants.
- · Wear protective goggles or face shield, hardhat and protective over-boots.

## **SKIN CARE**

- Wash areas of the skin that come in contact with wet cement in clean, cool water. Use a pH-neutral or slightly acidic soap. Check with the soap supplier or manufacturer for information on the acidity and alkalinity of the soap.
- Consider using a mildly acidic solution such as diluted vinegar or a buffering solution to neutralize caustic residues of cement on the skin.
- Do not wash with abrasives or waterless hand cleaners, such as alcohol-based gels or citrus cleaners.
- Avoid wearing watches and rings at work since wet cement can collect under such items.
- Do not use lanolin, petroleum jelly, or other skin softening products. These substances can seal cement residue to the skin, increase the skin's ability to absorb contaminants, and irritate the skin. Skin softening products also should not be used to treat cement burns.



PPE Products are available at Cemstone Supply 651.905.1500



## CEMSTONE

## **DANGER - CONCRETE MAY CAUSE BURNS TO EYES AND SKIN!**

ROUTES OF ENTRY AND HEALTH EFFECTS: WARNING: INJURIOUS TO THE EYE, CAUSES SKIN IRRITATION. READ THIS WARNING BEFORE USING.

**SKIN/EYE CONTACT:** Fresh ready-mixed concrete has an alkalinity level (pH) between 12 and 13; therefore, it may cause irritation and alkali burns, particularly when exposure is an area of skin previously subjected to abrasion or irritation. Prolonged or repeated contact may cause allergic dermatitis in sensitive individuals. Skin contact may cause local irritation of the affected areas. Preexisting skin conditions may be aggravated by exposure.

**INGESTION:** Unlikely, may cause irritation.

**INHALATION:** Fresh ready-mixed concrete does not pose an inhalation hazard. However, sawing, grinding, cutting, drilling or otherwise disturbing hardened concrete may contribute to elevated airborne repairable silica dust, which may cause silicosis. Always use appropriate respiratory protection industry environments in accordance with OSHA Regulations.

#### EMERGENCY AND FIRST AID PROCEDURES: DANGER: MAY CAUSE BURNS TO EYES AND SKIN, READ BEFORE USING.

- **SKIN CONTACT:** Wash skin with large amounts of soap and water. For minor irritation, apply a lanolin-containing cream to skin after washing. Contact a physician if persistent or severe irritation or discomfort occurs.
- **EYE CONTACT:** Contact a physician immediately. Flush eyes with large amounts of water for at least 15 minutes.
- **INGESTION:** Due to the nature of this material, it is unlikely that it will be ingested. If this does occur, remove individual from the area. If the individual is conscious, two or three glasses of milk or water should be provided to dilute stomach contents. Do not induce vomiting. Contact a physician or poison control center.

## AVISO: CONCRETO MEZCLADO FRESCO PUEDE CAUSAR IRRITACIÓN DE LA PIEL, GRAVES QUEMADAS QUÍMICAS O DAÑO PERJUDICIAL A LOS OJOS!!!

(vea el lado contrario para precauciones)

- Evite contacto con la piel y lárese pronto las partes expuestas con agua.
- Si él poluo del cemento o la mezcla fresca de concreto le cae eu los ojes, enjuáguese los ojos inmediatamente y repetidamente cou agua y obtenga pronto atencio medica.
- Evite contracto indirecto a través de la ropa. Enjuangue la ropa que y estado en contacto, cemento con el contreto, cemento o mortero mojado.
- Las siguientes clases de ropa debieran ser usados para obteuer coutacto mínimo cou la piel cuando sé usau estos productos:
- botas de caucho altas y ajustadas suficiente para impedir e/ contacto
- guantes de caucho
- pantalones largos metidos dentro de las botas
- cojincillo impermeables para los rodillas
- gafas ahumadas que la queden bien pegadas a los ojos

#### No Corra et Riesgo!

## CEEB TOOM: COV XIS MAS UAS NYUAM QHUAV TOV TAU MUAJI PEEV XWM UA Kom yus tej tawv nqaij mob khaus, muja tshuaj kub, lossis ua kom Qhov muag púas.

(xyuas sap nrauv kom paub txhuag)

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