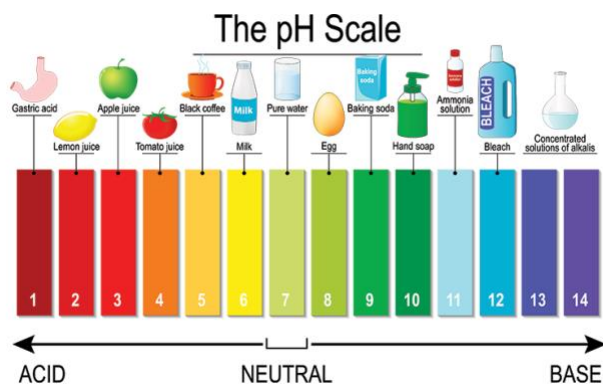


What is a Concrete Burn?

A concrete burn is a chemical burn, and the result of caustic Portland cement material having prolonged contact with your skin. It is particularly insidious as a burn may develop over a period of hours to days. A concrete burn has the potential to cause second and third degree burns that blister, swell, ooze and bleed. Scars and disfigurements can occur in extreme cases. Once these burns have been noticed, they have likely caused damage.

What Causes the Burn?

According to OHS online, Portland cement has a pH of 12 to 13. This is a strong alkaline that is similar in strength to bleach. On the flip side, human skin has a slightly acidic pH of about 4.5. This shows how unnatural this material is to our skin.



Prevention

Prolonged exposure to this caustic material can occur when gloves, clothes, boots and other PPE traps the material against your skin. Prevention, and awareness are key to ensuring these burns do not occur.

Some basic precautionary measures to take are:

- Appropriate worker training on using and handling of concrete materials.
- Review of SDS during toolbox meetings
- Assessment and mitigation of all hazards
- Washing hands with pH neutral soap before putting gloves on
- Wearing all appropriate PPE- clean clothes daily, gloves rated for concrete, safety footwear, safety glasses
- Removal of contaminated clothing & PPE

Concrete Burn Symptoms

Some symptoms of these burns are: swelling, redness, itching, blisters, scabs, pain. Note that symptoms may worsen over time.

First Aid

- When you notice concrete on your skin, remove any jewellery, PPE, and concrete soaked clothes
- Brush away dry concrete on skin (before rinsing, as more wet concrete can compound the problem)
- Flush burn/ affected area for about 20 minutes with lukewarm water
- Seek medical attention after rinsing skin. Ensure medical staff are notified that this is a concrete burn, and special precautions will be needed
- **Avoid applying topical creams or lotions to burn, this may trap concrete on skin**

Something to Think About

Employers have the duty to protect the health, safety and welfare of their workers while they are at work. There is an onus to train workers on the hazards, and how to mitigate them. Supervisors have the duty to protect the workers they supervise, and workers must protect themselves and others from their acts or omissions.

These duties make it the law to use prevention strategies to protect workers. The best way to prevent harm is to reduce or eliminate exposure to harmful chemicals. Consider equipment that limits manual handling of concrete. In turn workers will remain at work longer, without illness or injury.

Sources

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Tool Box Talk

When accidents and incidents happen on the jobsite, we are always quick to point the finger at lack of training, not following practices or procedures, or even improper supervision. The idea that the hazards and dangers associated with the job were not properly communicated to all of the workers is often missed.

Tool Box Talks can go by many names, and although formats may vary, these meetings all serve one purpose: to inform employees and contract workers. Tool Box Talks are short, informal, meetings between management and the workers on a jobsite. The goal of these meetings is to reinforce current safe job procedures, inform workers of new and/or relevant procedures, review recent safety violations/incidents, and ensure workers are up-to-date on the information required to complete their work safely.

Always use a Tool Box Talk form to record the meeting topic, date, who was in attendance, and any follow-up actions to be taken. Not only do these forms help with consistency of record keeping, but they also ensure that nothing is missed. At the end of the meeting have management sign off on the form.

One of the most important aspects of a Tool Box Talk is giving workers an opportunity to voice their concerns and ask questions. All employees have a right to participate in health and safety as it relates to their work and it is the supervisor or manager's responsibility to create an environment for them to do so. Once the meeting is over, and the form is filled out, it should be filed with other documented Tool Box Talks.

Remember that Tool Box Talks are short and informal, they are not meant to be intimidating. Use the opportunity to have fun and stay on top of what is necessary to keep safety culture a strong part of the business.

For a full listing of Tool Box Talk topics, visit: www.scsaonline.ca/resources/tool-box-talks

For a copy of the Tool Box Talk form, visit: www.scsaonline.ca/pdf/Tool_Box_Meeting.pdf

About the Saskatchewan Construction Safety Association

The Saskatchewan Construction Safety Association (SCSA) is an industry-funded, membership-based, nonprofit organization that provides cost-effective, accessible safety training and advice to employers and employees in the construction industry throughout the province to reduce the human and financial losses associated with injuries. Registered March 20, 1995, the SCSA is, and has been since inception, committed to injury prevention. Serving almost 10,000 member companies with business offices in both Regina and Saskatoon, the major business units of the association are Advisory Services, Business Development, Corporate Services, Program Services and Training. The mission of the SCSA is constructing safety leadership in Saskatchewan and the vision is to create the safest construction environment in Canada.