

HAZARD ALERT

EYE WASH & DELUGE SHOWERS

Each year thousands of the employees suffer eye injuries that impair vision or deprive them of their eye sight altogether. Chemicals splashed in the eye cause approximately one fifth of all debilitating eye injuries employees sustain. Over 90% of these eye injuries could be prevented by following established safety guidelines and using appropriate eye protective equipment for the task. If an employee gets foreign particles in his/her eyes or a chemical spill on their body, an emergency eyewash station or deluge shower is the most important initial step in first-aid treatment. Chemical burns to the eye are among the most urgent of emergencies.

An eyewash station/deluge shower is required if:

- The Material Safety Data Sheet (MSDS) indicates a chemical in use is caustic, toxic, or corrosive
- The MSDS indicates that serious eye damage may result
- Warnings such as, "causes chemical burns" or "causes permanent eye damage" are posted on container labels
- Battery servicing areas
- Chemical storage and mixing areas
- Eyewash station/deluge showers must have the following:
 - Pure clean water
 - Hands free operation
 - Constant water flow rate for a full 15 minutes
 - Highly visible markings and signs
 - Unobstructed access

The single most important treatment for chemically burned eyes is copious irrigation within 10 seconds of injury. This means that victims should not have to climb over or around obstacles to find the eyewash station.

Accessibility:

- Locate as close to the hazardous area as possible
- Make sure there are no barriers to the unit
- Make sure there is no separation by a partition from the hazardous work area.
- Should be located where there is an appropriate drainage system to remove excess water
- Do not locate near electrical equipment that could



- become wet during an emergency
- Outside location should have freeze protection for the unit

The following checklist offers additional information for training employees in the proper use of eyewash and safety shower facilities:

- In case of chemical exposure, flush skin or eyes with cool water for at least 15 minutes. **DO NOT RUB!**
- Get medical assistance immediately following flushing.
- If possible, continue flushing while on way to medical help.
- Know the effects of chemicals with which you are working. Read, ask questions about, and understand material safety data sheets for each chemical with which you work.
- Always wear personal protective equipment.
- Learn the location and use of all emergency equipment, even if you are working in a new area for only a brief time.
- Know how to help others reach showers or eyewashes and how to help them get medical assistance.
- Hold your eyes open with your hands while using an eyewash to be sure water reaches the eyes.
- Remove contaminated clothing after the shower has been activated.
- Immediately wash off even small amounts of chemicals.

Clean, Functional Equipment:

- Eye wash stations/deluge showers must be inspected and activated at least monthly to insure they function properly with adequate water flow, and are clean and sanitary
- Portable eyewash units are an option in areas where plumbed in water is not accessible or of high enough quality and must be able to flush for 15 minutes
- Portable units also need an anti-bacterial additive to ensure proper water sanitation
- Flushing with any water is better than none, but purified water reduces potential for secondary eye infections

Suggestion:

- Request your maintenance staff to test and inspect stations/showers at the same time they perform their monthly fire extinguishers inspection.