



Sperian Emergency Eyewash

WORLD LEADER IN EMERGENCY EYE CARE

Sperian® is the new name of Fend-all®. Since 1950, Sperian Protection and its predecessors have manufactured and distributed leading safety and health products worldwide. Sperian is the well-respected market leader in portable eyewash stations and is recognized for its wide range of emergency eyewash products including the **first** 100% sterile sealed-fluid cartridge and 100% sterile delivery station, the **first** self-contained gravity-fed station and the **first** heated self-contained gravity-fed station.

When Seconds Count, Portable Matters

The need for immediate flushing requires the installation of emergency eyewash devices to be installed in accessible locations that require no more than 10 SECONDS to reach. For a strong acid or strong caustic, the eyewash should be immediately adjacent to the hazard. Sperian self-contained, portable eyewash stations require no plumbing for easy and affordable placement near any workplace hazard, and deliver a sterile or buffered saline solution superior to tap water for emergency eye care. Ordinary tap water, used in plumbed or some tank-type eyewash devices, may contain harmful bacteria or contaminants that can cause additional eye damage. A sterile or buffered saline solution is the most effective flushing fluid for emergency first aid.

Fendall 2000™

Introducing the new Fendall 2000 100% Sterile Emergency Eyewash System – the innovation you expect from Sperian. We've listened to our end-users and have built an eyewash station with all of the features and benefits that you would expect in a state-of-the-art, portable emergency eyewash station from Sperian. Our ingenious design delivers a steady soft ribbon of 100% sterile saline from a 100% sterile delivery system, minimizing the risk of further injury. We've added comfort features, ergonomic design, and an alarm system that together ensure compliance with the full 15-minute ANSI flushing requirement.



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⚠ WARNING! Sperian equipment should only be used in conjunction with the manufacturer's instructions. Failure to follow such instructions could result in serious injury including diminution or loss of vision.

Primary Emergency Eyewash Devices

15-Minute Flush Time

- Meets ANSI standard
- 24-month maintenance*



Sterile Sealed Fluid Cartridge

NEW! Fendall 2000™

- Delivers 100% sterile saline from a 100% sterile delivery system
- 24-month cartridge life,* saves time and money on replacements and inspections
- Built-in alarm system that sounds when the unit has been activated and again when the injured individual has completed the required 15-minute flush
- Deactivation button that allows for fast and easy maintenance without false activation
- Arm/headrest provides user comfort, enabling better compliance
- Integrated waste containment to prevent spills and is easily emptied
- Sleek assembly that fits nearly anywhere
- Self-contained, with no plumbing required, makes this highly portable
- Easy-view side windows to check sterile solution expiration date and key contact information
- Comes complete with emergency eyewash station sign, mounting bracket, installation DVD, tamper seal, and 1-year warranty. *Sterile saline solution cartridge sold separately*
- Meets ANSI Z358.1-2004 15-minute flush requirement for primary eyewash stations

Item #	Description
32-002000-0000	Sterile Eyewash Station (English)
32-002000-0070	Sterile Eyewash Station (Spanish)
32-ST2050-0000	Sterile Saline Refill Cartridge For Fendall 2000

*Shelf life determined by date of manufacture. Always check product expiration date

One Chance. One Choice. Sterile.

With the Fendall 2000, injured workers are treated with 100% sterile, buffered and physiologically balanced saline solution.

- 0% Bacteria
 - 0% Molds
 - 0% Fungus
 - 0% Pollutants
- = 100% Sterile Eyewash

With the innovative Fendall 2000, the user benefits.



Easy-to-install single cartridge features 100% sterile saline



Alarm sounds upon both activation of the unit and completion of 15-minute flush



Maintenance button quickly deactivates unit for inspection



Reservoir collects waste solution for safety and for easy disposal



Full visibility is provided through side window to quickly check expiration date

Visit our website at: www.fendall.com
Visit www.ansi.org for complete ANSI Z358.1-2004 Standard.

For more information or to order products on this page, please call Customer Care at 800 682-0839.

Primary Emergency Eyewash Devices

Sealed Fluid Cartridge with Sterile Option

Fendall Pure Flow 1000®

- Easy installation. No plumbing required. Can be easily and affordably placed near most workplace hazards with single bracket mounting device or transported with optional universal cart or stand
- Factory-sealed fluid cartridges eliminate mixing, measuring, and the opportunity for airborne particles or microorganisms to contaminate the fluid prior to use
- Easy to activate sure-grip handle provides instant, simple activation. When not in use, cover keeps dirt and other debris from collecting in the basin and nozzle area
- Unique nozzle design delivers a soft “ribbon” of our buffered saline solution
- Permits thorough flushing with a constant flow rate and stream height that provides 0.4 gpm for entire 15-minute cycle required by ANSI Z358.1-2004
- Captures waste fluid to eliminate spill hazards and simplify fluid disposal
- Integral valve at bottom of unit allows easy draining of reservoir after use
- 24-month cartridge life,* at least four times longer than other primary self-contained eyewash devices, saves time and money on replacements and inspections. *Cartridges sold separately*
- Cartridges remain sealed until activated. Expiration date is included on activation straps – and cartridge replacement takes less than five minutes

Item #	Description
32-001000-0000	Eyewash Station (English)
32-001000-0022	Eyewash Station (French Canadian)
32-001000-0070	Eyewash Station (Mexican Spanish)
32-001050-0000	Saline Refill Cartridges for Fendall Pure Flow 1000
32-ST1050-0000	Sterile Saline Refill Cartridges for Fendall Pure Flow 1000
32-001052-0000	High Humidity Saline Refill Cartridges for Fendall Pure Flow 1000

*Shelf life determined by date of manufacture. Always check product expiration date

15-Minute Flush Time

- Meets ANSI standard
- 24-month maintenance*



Factory Sealed Fluid Cartridges – No Mixing or Measuring

Fendall Pure Flow 1000's sealed cartridge design eliminates mixing, measuring, and the opportunity for airborne particles or microorganisms to contaminate the fluid prior to use. Factory-sealed cartridges feature an integral nozzle and hose design to ensure delivery of purified, contaminant-free, and physiologically correct saline solution.



High Humidity Sealed Fluid Cartridges

This adapter helps prevent Fendall Pure Flow 1000 saline cartridges from bowing or from deterioration caused by uncontrolled humid environmental conditions. It allows the Fendall Pure Flow 1000 unit and its cardboard saline cartridges to withstand high humidity environments that cannot be easily regulated.

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Primary Emergency Eyewash Devices

15-Minute Flush Time

- Meets ANSI Standard
- 3-6 month maintenance cycle

Refillable

Fendall Porta Stream® II + III

- Easy installation with no plumbing required. Can be easily and affordably placed near most workplace hazards with single bracket mounting device or transported with optional universal cart or universal stand. Molded handle accepts hanging bracket for vertical or horizontal surface installation
- Versatile flushing fluid options include Sperian Saline – a buffered, saline solution superior to tap water for emergency eye care, and Sperian Water Additive
- Large 16 gallon (60.5L) capacity permits thorough flushing by providing 0.4 gpm over the entire 15-minute flushing period required by ANSI Z358.1-2004
- Nozzles cover a wide area around the eyes
- Simple strap design is easily removed for hands-free flushing, leaving hands free to hold eyelids open
- Properly installed, the system may be safely leaned upon during use
- Large fill hole/lockable fill cap to simplify refilling and cleaning. Reduces risk of possible tampering
- Easy-to-use design features simple, highly visible operating instructions on the unit itself
- Saline Concentrate requires 6-month maintenance cycle. Water Additive requires a 4-month maintenance cycle



32-0000200-0000

Fendall Porta Stream III

In addition to the Fendall Porta Stream II features, the Fendall Porta Stream III is freeze-protected by a special form fitted insulated cover and twin, 600 watt, 110 volt thermostatically controlled heaters for indoor and outdoor use. The fluid-heating system makes it ideal for use between 72°F and -32°F (22°C to -36°C).



32-000310-0000

Item #	Description
32-000200-0000	Eyewash Station (English) with Saline Concentrate
32-000200-0022	Eyewash Station (French Canadian) with Saline Concentrate
32-000200-0070	Eyewash Station (Mexican Spanish) with Saline Concentrate
32-000230-0000	Eyewash Station (English) with Water Additive
32-000230-0022	Eyewash Station (French Canadian) with Water Additive
32-000230-0070	Eyewash Station (Mexican Spanish) with Water Additive
32-000310-0000	Eyewash Station (freeze protected) with Saline Concentrate

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Secondary Emergency Eyewash Devices

Refillable

Fendall Porta Stream® I

- Delivers 6 minutes of uninterrupted, hands-free flushing – without costly plumbing
- Easy installation with no plumbing required. Can be easily and affordably placed near most workplace hazards with single bracket mounting device or transported with optional universal cart or universal stand. Molded handle accepts hanging bracket for vertical or horizontal surface installation
- Supplied with either 70 oz. (2.07L) of Saline Concentrate which, when mixed with tap water, provides 6 gallons (22.7L) of buffered, saline solution superior to tap water for emergency eye care solution, or 8 oz. of Water Additive, enough for 14-16 gallons of water
- Nozzle strap is easily removed for hands-free flushing, leaving hands free to hold eyelids open
- Low maintenance with one-piece, molded construction and no moving parts
- Large fill hole simplifies refilling and cleaning
- Easy-to-use design features simple, highly visible operating instructions on the unit itself
- Saline Concentrate requires 6-month maintenance cycle. Water Additive requires a 4-month maintenance cycle
- Does not meet ANSI Z358.1-2004 15-minute flushing requirement



Item #	Description
32-000100-0000	Eyewash Station (English) with Saline Concentrate
32-000100-0022	Eyewash Station (French) with Saline Concentrate
32-000100-0070	Eyewash Station (Spanish) with Saline Concentrate
32-000130-0000	Eyewash Station (English) with Water Additive

Fendall Flash Flood®

- Easy installation with no plumbing required. Can be easily wall mounted for placement near most workplace hazards
- One-gallon sealed cartridges are easy to store and offer quick changes without mixing or measuring
- Dual nozzles provide simultaneous flushing to both eyes for three minutes
- Unique cartridge design delivers Sperian Saline – a buffered, pH-balanced saline solution that is superior to tap water for emergency eye care
- Highly portable system may be easily wall or table mounted
- Nozzle strap is easily removed for hands-free flushing, leaving hands free to hold eyelids open
- Easy-to-use design features simple, highly visible operating instructions
- Sperian Saline cartridges, once installed, require a 6-month maintenance cycle. Unopened cartridges have a shelf life of up to 24 months*
- Does not meet ANSI Z358.1-2004 15-minute flushing requirement



Item #	Description
32-000400-0000	Eyewash Station (English)
32-000400-0022	Eyewash Station (French Canadian)
32-000400-0070	Eyewash Station (Mexican Spanish)
32-000402-0000	Wire Storage Rack for Fendall Flash Flood
32-000401-0000	Saline Refill Cartridges for Fendall Flash Flood

*Shelf life determined by date of manufacture. Always check product expiration date

For more information or to order products on this page, please call Customer Care at 800 682-0839.

6-Minute Flush Time

- Great for dust or particles
- 3-6 month maintenance cycle

Secondary Eyewash Devices

- Do not meet the ANSI Z358.1-2004 Standard for 15-minute flushing requirements
- Intended to support, not replace, primary plumbed or self-contained units.

Fendall Porta Stream I and Fendall Flash Flood units are suitable for nuisance situations such as dust or particle flushing where a 15-minute flushing device is not a requirement.

3-Minute Flush Time per Cartridge

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Emergency Decontamination Shower

Operational in Less Than 2 Minutes

Provides decontamination facilities in accordance with OSHA standard 1910.120 without distracting emergency responders from their primary task.

Suitable for Emergency Response Vehicles

The Sperian® Emergency Decontamination Shower is ideal for a variety of locations, including construction sites, loading docks, agricultural locations, and other emergency response areas.



Emergency Decontamination Shower

- Quick deployment – with one person – fully operational in less than two minutes
- Assures users of thorough decontamination with 5 gallon per minute flow rate at 40-psi water supply pressure
- Accommodates emergency responder in full chemical gear with SCBA
- Over 120-gallon capacity provides collection for up to 30 minutes of shower use
- Connects to standard garden hose
- Fully deployed and operational within ten seconds of turning on the water
- Entire system can be stored in convenient carrying bags on virtually any response vehicle (requires < 5 cu. ft. of storage each)
- Optional drench hose can be used to assist the emergency responder or victim with decontamination or drenching; otherwise can be used with a standard garden hose



Item #	Description
32-001187-0000	Emergency Shower with Carry Bag
32-001180-0000	Emergency Shower Only (Carry Bag Not Included)
32-001188-0000	Retention Pool With Carry Bag
32-001182-0000	Retention Pool Only (Carry Bag Not Included)
32-001181-0000	Carry Bag for Pool
32-001183-0000	Carry Bag for Shower

Personal Eyewash Bottles



Saline Personal Travel Bag

- Rugged, durable bag securely holds six 1 oz. and six 4 oz. bottles of Sperian saline sterile eyewash
- One-piece case construction with pockets to hold bottles, and a separate insert for important documents or additional first aid necessities
- Adjustable strap allows bag to fit around the back of a car, truck or sport utility vehicle seat for easy transport and convenience
- Bag is made of vinyl material allowing it to remain clean and visible
- Sperian saline bottles proudly made in the USA

Item #	Description
32-000440-0000	13" x 9" x 4", Qty 1, 4 lbs.

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Personal Eyewash Bottles

Saline Eyewash Bottles

- Bottles contain a buffered, saline solution that is sterile and superior to tap water for emergency eye care
- Blow-fill-seal bottles are tamper resistant, yet easily removed in an emergency
- Extended-flow nozzles (16 and 32 oz. containers) provide longer flow than conventional 16 and 32 oz. containers
- User-controlled volume delivery (1, 4, 8 oz. products). Delivers drops or an irrigating stream of solution, depending on the squeeze pressure applied to the bottle
- Ensured quality and lasting value with FDA-grade polyethylene bottles featuring lot numbers and expiration dates
- Does not meet ANSI Z358.1-2004 15-minute flushing requirement



Item #	Description
32-000455-0000	32 oz. Bottles with Extended Flow Nozzles
32-000454-0000	16 oz. Bottles with Extended Flow Nozzles
32-000445-0000	8 oz. Bottles with User-Controlled Delivery – Drops or Stream
32-000452-0000	4 oz. Bottles with User-Controlled Delivery – Drops or Stream
32-000451-0000	1 oz. Bottles with User-Controlled Delivery – Drops or Stream

*Shelf life determined by date of manufacture. Always check product expiration date

Sperian® Saline Personal Eyewash Products

Personal Eyewash Products contain a buffered, saline solution that is sterile. Personal eyewash devices are intended to supplement, not replace, primary eyewash units.

Personal products may also be used for continued irrigation when moving an injured person from a primary eyewash unit to medical care. 36-month shelf life from date of manufacturing.*

Personal Eyewash Wall Stations

Saline Wall Stations

- Sealed, sterile, bottles contain Sperian Saline – a buffered, saline solution superior to tap water for emergency eye care
- Blow-fill-seal bottles are tamper resistant, yet easily removed in an emergency
- Extended flow opening provides longer flow rate than conventional bottles
- Durable, open face design holds bottles firmly in place with easy access to bottles in an emergency
- Mounts to wall with provided screws
- Integral overhang protects bottles from dust and debris to minimize maintenance requirements
- Durable plastic is easy to clean
- Simple, highly visible operating instructions are provided on each unit. 16 and 32 oz. bottles feature English/Spanish bi-lingual instructions
- Ensured quality and lasting value with FDA-grade polyethylene bottles featuring lot numbers and expiration dates
- Does not meet ANSI Z358.1-2004 15-minute flushing requirement



32-000471-0000

Item #	Description
32-000460-0000	16 oz. Single Eyewash Wall Station
32-000461-0000	32 oz. Single Eyewash Wall Station
32-000462-0000	32 oz. Double Eyewash Wall Station
32-000471-0000	32 oz. Double Body Flush Wall Station

*Shelf life determined by date of manufacture. Always check product expiration date



Keep Bottles Near Your Workers

Durable Wall Stations provide immediate flushing until the injured person can be helped to a primary emergency eyewash device. They offer high visibility in a hazard area and are readily available for emergency flushing and decontamination of the eyes, face and body.

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Emergency Eyewash Refills

Why is a sterile eyewash solution better?

- Sterile solution offers unmatched safety.
- When compared to tap water, sterile solution offers the best protection from contaminants and bacteria that could lead to secondary trauma to an injured eye.
- Sterile solution reduces the risk of potential liability if eye injury from flushing with contaminated water occurs.

Fendall 2000™ Sterile Saline Cartridge

- Up to 24 month* cartridge life
- 6.87 gallons (26L) total
- Sterile, buffered, pH balanced, saline solution
- Cartridge change takes less than 5 minutes



Item #	Description
32-ST2050-0000	Sterile Saline Refill Cartridge for Fendall 2000

*Shelf life determined by date of manufacture. Always check product expiration date

Fendall Pure Flow 1000® Sterile Saline Cartridges

- Up to 24 month* cartridge life
- 3.5 gallon (13.2L) each, 7 gallon (26.4L) total
- Sterile, buffered, pH balanced, saline solution
- Cartridge change takes less than 5 minutes



Item #	Description
32-ST1050-0000	Sterile Saline Refill Cartridges for Fendall Pure Flow 1000

*Shelf life determined by date of manufacture. Always check product expiration date

Fendall Pure Flow 1000 Saline Cartridges

- Up to 24 month* cartridge life
- 3.5 gallon (13.2L) each, 7 gallon (26.4L) total
- Preserved, buffered, pH balanced, saline solution
- Cartridge change takes less than 5 minutes



Item #	Description
32-001050-0000	Saline Refill Cartridges for Fendall Pure Flow 1000

*Shelf life determined by date of manufacture. Always check product expiration date

High Humidity Adaptors for Fendall Pure Flow 1000 Cartridges

- No extra assembly necessary, comes attached to the cartridges
- Designed for units located in high humidity moisture levels of 80% and higher



Item #	Description
32-001052-0000	Sterile Saline Refill Cartridges for Fendall Pure Flow 1000

*Shelf life determined by date of manufacture. Always check product expiration date

Emergency Eyewash Refills

Fendall Flash Flood® Cartridge

- Up to 24 month* unopened cartridge shelf life (6 months activated)
- Preserved, buffered, pH balanced, saline solution
- Cartridge change takes less than 1 minute

Item #	Description
32-000401-0000	Saline Refill Cartridges for Fendall Flash Flood

*Shelf life determined by date of manufacture. Always check product expiration date



Saline Solution

- Use directly from container (1 gal, 3.8L) to refill the eyewash device. No mixing or measuring required
- Preserved, buffered, pH balanced, saline solution

Item #	Description
32-000502-0000	Saline Solution (Premixed) for Use with Fendall Porta Stream I, II, III

*Shelf life determined by date of manufacture. Always check product expiration date



Concentrate

- Mix with clean, potable water (10:1 ratio)
- Creates a preserved, buffered, saline solution

Item #	Description
32-000513-0000	Saline Concentrate for Use with Fendall Porta Stream II, III
32-000509-0000	Saline Concentrate for Use with Fendall Porta Stream I

*Shelf life determined by date of manufacture. Always check product expiration date



Water Additive

- Mix with clean potable water
- One bottle (8 oz.) suitable for 14-16 gallons
- 30-month* shelf life (unopened)
- Sold in cases of four with tamper evident seals

Item #	Description
32-001100-0000	Water Additive for Use with All Portable Devices

*Shelf life determined by date of manufacture. Always check product expiration date



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Emergency Eyewash Accessories



Dust Cover

- Protects eyewash basin from dirt, dust and debris
- Attaches to the eyewash pull strap
- Cover and pull strap are removed in one motion

Item #	Description
32-000517-0000	Dust Cover for Fendall Porta Stream I, II



Reflective Cover

- Protective cover helps maintain fluid temperature
- Use in environments of high solar energy
- Flap and pull strap are removed in one motion

Item #	Description
32-000532-0000	Reflective Cover for Use with Fendall Porta Stream II
32-000531-0000	Reflective Cover for Use with Fendall Porta Stream I



Fluid Disposal Cart

- Allows easy collection of used flushing fluid
- Concave top surface with center drain
- Dual wheels, molded handle for easy portability

Item #	Description
32-000511-0000	Disposal Cart for Use with Fendall Porta Stream I, II, III, and Fendall Flash Flood

Universal Eyewash Cleaning Kit

- For use with all tank-type, eyewash stations
- Allows thorough eyewash device cleaning
- Clean prior to refilling, to remove contamination
- Helps remove contaminants from tank interior



Item #	Description
32-000518-0000	Cleaning Kit for Use with All Tank-Type, Eyewash Stations

Waste Container

- 28 gallon waste container fits securely on cart
- Not required for Fendall Pure Flow 1000® or Fendall 2000™



Item #	Description
32-001061-0000	Waste Container for Use with Universal Cart #32-001060-000

Emergency Eyewash Accessories

Universal Bottle Mounting Device

- Expandable strap with magnetic backing holds various personal eyewash bottle sizes up to 32 oz.
- Can be mounted for permanent placement
- Easy installation, takes less than one minute
- Fits all Sperian® personal eyewash bottles as well as most competitor bottles
- 4 per case – sold in cases only



Item #	Description
32-000435-0000	Universal Bottle Mounting Device

Universal Eyewash Stand

- Inexpensive alternative to wall mounting
- Versatile stand can be mounted to a floor or be used as free standing
- Compact and easy to assemble (assembly time – 5 minutes or less)
- All assembly parts are included
- Lightweight, sturdy steel tubing design (25 lbs)



Item #	Description
32-001065-0000	Eyewash stand for use with Fendall 2000, Fendall Pure Flow 1000, and Fendall Porta Stream I, II and III

Universal Eyewash Cart

- Provides quick, easy portability for self-contained, gravity-fed emergency eyewash devices
- Reliable, hand-truck design ensures durability



Item #	Description
32-001060-0000	Eyewash Cart for Use with All Portable Devices

Wire Storage Rack

- Wire rack holds 4, 1-gallon cartridges
- Allows multiple cartridges to be stored in immediate vicinity of Fendall Flash Flood



Item #	Description
32-000402-0000	Wire Rack for Use with Fendall Flash Flood

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Reference: Compliance Regulations

15 MINUTE FLUSH

The type of emergency eyewash device, the flushing solution used, and the maintenance of that device can greatly affect the treatment and eventual recovery of an injured eye. Safety professionals can choose from a variety of delivery systems and flushing fluids when selecting emergency eyewash devices. The primary eyewash unit required for a hazard area must meet the requirements set by ANSI Z358.1-2004. Eyewash stations and bottles that supply less than the minimum flushing requirements of ANSI Z358.1-2004 are intended to support, not replace, primary units. These supplemental or personal eyewash units are referred to as secondary devices.

10 SECOND RUSH

Experts agree the most important first aid procedure for eye contact with hazardous materials is abundant irrigation within seconds. The need for immediate flushing requires the installation of emergency eyewash devices in accessible locations that require no more than 10 SECONDS to reach. Studies have shown there is a significant difference in the outcome of chemically burned eyes that receive prompt irrigation and those that did not undergo immediate flushing – patients receiving prompt irrigation required less surgery, had shorter hospital stays, and faster recoveries.

Primary



Secondary/Personal



COMPLIANCE REGULATIONS

OSHA Requirements

OSHA specifies requirements for workplace eye hazard areas. High incident eye injury areas have activities involving use of paints and solvents, battery charging, tool parts washing, laboratory work, chemical storage, and chemical pumping and mixing. Injurious materials may be present in solid, liquid, powder, mist or vapor form.

Hazard Communication Standard, 29 CFR 1910.1200, requires employers to identify chemicals used in the workplace. This regulation further mandates that employers provide information to employees regarding appropriate safety equipment and emergency procedures for the safe use of workplace chemicals. CFR Title 29, Parts 1901 to 1910 are applicable. Part 1910.151(c) states: "Where the eyes or body of any person may be exposed to injurious corrosive materials, suitable facilities for quick drenching or flushing of the eyes and body shall be provided within the work area for immediate emergency use."

ANSI Standard

The ANSI Z358.1-2004 Standard for Emergency Shower and Eyewash Equipment is the definitive standard for meeting the OSHA requirement for "suitable facilities."

ANSI Z358.1-2004 states specific installation requirements for plumbed/self-contained eyewashes.

It is the employer's responsibility to ensure that eyewashes shall be in accessible locations that require no more than 10 seconds to reach.

The eyewash unit shall be located on the same level as the hazard and the path of travel shall be free of obstructions that may inhibit the immediate use of the equipment. For a strong acid or strong caustic, the eyewash should be immediately adjacent to the hazard.

Performance requirements for plumbed/self-contained eyewash units are also specified by ANSI Z358.1-2004:

Plumbed and self-contained eyewash equipment shall be capable of delivering flushing fluid to the eyes not less than 1.5 liters (0.4 gpm) per minute for 15 minutes.

A means shall be provided to ensure that a controlled flow of flushing fluid is provided to both eyes simultaneously at a velocity low enough to be non-injurious to the user.

Nozzles shall be protected from airborne contaminants. Whatever means is used to afford such protection, its removal shall not require a separate motion by the operator when activating the unit.

The eyewash unit shall be designed to provide enough room to allow the eyelids to be held open with the hands while the eyes are in the flushing fluid stream.

Visit www.ansi.org for complete ANSI Z358.1-2004 details

Reference: Eyewash Options

SPERIAN® SALINE SOLUTIONS

Sperian's world-renowned delivery systems and devices utilize a sterile solution or buffered saline solution, both of which are superior to tap water or water with an additive for emergency eye care. Unlike tap water that may contain contaminants that can further irritate or damage the eyes, saline solution is purified and physiologically balanced to the pH and salinity of human tears.

Saline solution is offered in factory-sealed cartridges and personal eyewash bottles. Factory-sealed fluid cartridges eliminate mixing, measuring, and the opportunity for airborne particles or microorganisms to contaminate the fluid prior to use. Sealed fluid containers last up to 24 months* and replacement takes less than five minutes. There is a 36-month shelf life* on sterile personal eyewash bottles.

FEATURES

- Sterile

BENEFITS

Free from living microorganisms and bacteria, especially those that can cause disease and further harm to an already injured or compromised eye

- Buffered

Ensures neutral pH of flushing fluid and reduces likelihood of fluid causing additional damage to an injured eye

- Saline solution

Minimizes irritation and maximizes flushing comfort with a solution that is physiologically balanced to the pH and salinity of human tears

- Contaminant-free

Does not contain irritants like chlorine, rust and various microbial contaminants that may be found in tap water

- User-friendly

Allows maximum user comfort and flushing effectiveness over the entire 15-minute flushing period required by ANSI Z358.1-2004

- Versatile

Saves maintenance costs with quick fluid change options including up to 24 month* sealed cartridge life

*Shelf life determined by date of manufacture. Always check product expiration date

OTHER SPERIAN SOLUTION OPTIONS

Sperian Concentrate

Sperian Concentrate creates a flushing fluid solution that reacts better with the eye than water or water with an additive does. Sperian Concentrate contains special additives to provide a cost-effective solution for eyewash refills. When mixed in the proper ratio with potable (drinking) water, Sperian Concentrate provides a preserved, buffered, saline solution.

Sperian Water Additive

When mixed with potable water, Sperian Water Additive provides a preserved solution for use in self-contained eyewash devices. Sperian Water Additive mixed with water is cost-effective, but does not impact possible contaminants. Sperian Water Additive is non-toxic in the recommended concentration.

EMERGENCY EYEWASH CONSIDERATIONS

Cost – Plumbed vs. Self-Contained

Once potential hazards have been identified, the employer must select and install emergency eyewash units in appropriate locations throughout the facility that require no more than 10 seconds for any person using hazardous materials to reach.

Depending on the number of hazard locations and facility layout, installation of plumbed emergency eyewash devices within 10 seconds of potential hazards can be cost-prohibitive. Plumbed units require a readily available water source close at hand and a drain to service the unit.

Self-contained emergency eyewash devices use sealed fluid cartridges or a gravity-fed, tank design with no costly plumbing needed. Self-contained systems provide affordable, portable placement within 10 seconds of most workplace hazards.

Maintenance

Proper maintenance of eyewash devices is essential. ANSI Z358.1-2004 requires that plumbed units be activated weekly to verify proper operation. Self-contained devices must be inspected and maintained according to manufacturer's instructions.

Fluid in devices using water mixed with an additive or a factory prepared liquid concentrate must be changed in accordance with the manufacturer's directions.

Factory-sealed fluid cartridges offer low maintenance charging up to 24 months unless the eyewash device is activated sooner.*

All emergency eyewash systems must be inspected at least annually to ensure conformance with ANSI Z358.1-2004 requirements.

*Shelf life determined by date of manufacture. Always check product expiration date

Flushing Fluid Quality

While tap water is widely available, it is not the preferred solution for emergency eye flushing. Tap water used in plumbed systems or some tank-type eyewashes may contain various particulates or harmful contaminants.

Particles in the flushing stream can injure the eye and may obstruct fluid flow. Tap water may also contain various microorganisms and bacterial contaminants from the interior surface of water pipes that can pose a threat to injured eye tissue.

The ideal solution for emergency eye flushing is 100% sterile or clean, contamination-free, buffered, and pH balanced saline solution which minimizes the extent of damage caused by injurious materials.

Reference: Sterile Eyewash Solutions

Reference: Product Features Matrix

THE SPLASH ON STERILE EMERGENCY EYEWASH SOLUTIONS

Recent research has proven that sterile emergency eyewash solutions deliver additional benefits to the patient being treated. The findings were compelling enough to advance the FDA's plans to enforce regulations on the use of sterile solutions in portable emergency eyewash.

Why Is A Sterile Eyewash Solution Better?

- Sterile solution offers unmatched safety.
- When compared to tap water, sterile solution offers the best protection from contaminants and bacteria that could lead to secondary trauma to an injured eye.
- Sterile solution reduces the risk of potential liability if eye injury from flushing with contaminated water occurs.
- Flushing eyes with tap water can be very painful. People find it virtually impossible to flush their eyes with tap water for the recommended 15 minutes. The water is often too cold or too hot to be tolerated. The presence of chemicals and contaminants in tap water can exacerbate the problem.
- Flushing with tap water can damage the epithelial layer of the eye. A study conducted by the Louisiana State University Health Sciences Center and the Kentucky Lions Eye Center found that flushing with tap water can further disrupt the eye's protective epithelial cell layer and cause additional corneal cell damage because it is incompatible with the pH of the eye.
- Tap water introduces contaminants into the injured eye. Plumbed eyewash stations can develop rust and scale in their supply lines. Though tap water is suitable for drinking, it does contain various irritants and contaminants including the free-living amoeba, Acanthamoebae. In fact, a December 2005 survey by the Environmental Working Group (EWG), a nonprofit environmental research and advocacy group based in Washington, DC, found 141 unregulated chemicals and an additional 119 for which the Environmental Protection Agency (EPA) has set health-based limits. Most common among the chemicals found were disinfection by-products, nitrates, chloroform, barium, arsenic and copper. Flushing these harmful elements into an already damaged eye can cause serious secondary injury and possible vision loss.
- By definition, Sterile means free from living microorganisms and bacteria, especially those that can cause disease and bring further harm to an already injured or compromised eye.

An easy formula to illustrate Sterile is:

0% Bacteria
0% Mold
0% Fungus
0% Pollutants

= 100% Sterile Eyewash

Essentially, there are no contaminants, no minerals, no scale, no living microorganisms, no rust, no chlorine and no irritants as a result of the sterilization process. The solution remains 100% Sterile; until the injured eye needs it!

Item #	Description	Primary Device	Secondary Device	Personal Device	Decontamination Shower	Portable	Sealed-Fluid Cartridge	Sterile Saline Solution	Buffered Saline Solution	Saline Concentrate	Water Additive	Refillable	Heated/Freeze Protected	Meets ANSI 15-Min. Requirement	SEI Certified
32-002000-0000	Fendall 2000 Sterile Eyewash Station (English)	•				•	•							•	•
32-002000-0070	Fendall 2000 Sterile Eyewash Station (Spanish)	•				•	•							•	•
32-ST2050-0000	Sterile Saline Refill Cartridge for Fendall 2000						•	•							
32-001000-0000	Fendall Pure Flow 1000 Eyewash Station (English)	•				•	•							•	•
32-001000-0022	Fendall Pure Flow 1000 Eyewash Station (French Canadian)	•				•	•							•	•
32-001000-0070	Fendall Pure Flow 1000 Eyewash Station (Mexican Spanish)	•				•	•							•	•
32-001050-0000	Saline Refill Cartridge for Fendall Pure Flow 1000						•	•							
32-ST1050-0000	Sterile Saline Refill Cartridge for Fendall Pure Flow 1000						•	•							
32-001052-0000	High Humidity Saline Refill Cartridge for Fendall Pure Flow 1000						•	•							
32-000200-0000	Fendall Porta Stream II Eyewash Station (English) w/Saline Concentrate	•				•				•		•		•	•
32-000200-0022	Fendall Porta Stream II Eyewash Station (French Canadian) w/Saline Concentrate	•				•				•		•		•	•
32-000200-0070	Fendall Porta Stream II Eyewash Station (Mexican Spanish) w/Saline Concentrate	•				•				•		•		•	•
32-000230-0000	Fendall Porta Stream II Eyewash Station (English) w/Water Additive	•				•					•	•		•	•
32-000230-0022	Fendall Porta Stream II Eyewash Station (French Canadian) w/Water Additive	•				•					•	•		•	•
32-000230-0070	Fendall Porta Stream II Eyewash Station (Mexican Spanish) w/Water Additive	•				•					•	•		•	•
32-000310-0000	Fendall Porta Stream III Eyewash Stn. (Freeze Protected) w/Saline Concentrate	•				•				•		•	•	•	•
32-000100-0000	Fendall Porta Stream I Eyewash Station (English) with Saline Concentrate		•			•				•		•			
32-000100-0022	Fendall Porta Stream I Eyewash Station (French) with Saline Concentrate		•			•				•		•			
32-000100-0070	Fendall Porta Stream I Eyewash Station (Spanish) with Saline Concentrate		•			•				•		•			
32-000130-0000	Fendall Porta Stream I Eyewash Station (English) with Water Additive		•			•					•	•			
32-000400-0000	Fendall Flash Flood Eyewash Station (English)		•			•		•				•			
32-000400-0022	Fendall Flash Flood Eyewash Station (French Canadian)		•			•		•				•			
32-000400-0070	Fendall Flash Flood Eyewash Station (Mexican Spanish)		•			•		•				•			
32-000401-0000	Saline Refill Cartridges for Fendall Flash Flood							•							
32-001187-0000	Emergency Shower with Carry Bag					•	•								
32-001180-0000	Emergency Shower Only (Carry Bag Not Included)					•	•								
32-001188-0000	Retention Pool with Carry Bag					•									
32-001182-0000	Retention Pool Only (Carry Bag Not Included)					•									
32-000440-0000	Saline Bottle Personal Carry Bag			•		•	•								
32-000455-0000	32 oz. Bottles with Extended Flow Nozzles			•		•	•								
32-000454-0000	16 oz. Bottles with Extended Flow Nozzles			•		•	•								
32-000445-0000	8 oz. Bottles with User-Controlled Delivery – Drops or Stream			•		•	•								
32-000452-0000	4 oz. Bottles with User-Controlled Delivery – Drops or Stream			•		•	•								
32-000451-0000	1 oz. Bottles with User-Controlled Delivery – Drops or Stream			•		•	•								
32-000460-0000	16 oz. Single Eyewash Wall Station			•		•	•								
32-000461-0000	32 oz. Single Eyewash Wall Station			•		•	•								
32-000462-0000	32 oz. Double Eyewash Wall Station			•		•	•								
32-000471-0000	32 oz. Double Body Flush Wall Station			•		•	•								
32-000502-0000	Saline Solution (Premixed) for Use w/Fendall Porta Stream I, II, III								•						
32-000513-0000	Saline Concentrate for Use with Fendall Porta Stream II, III									•					
32-000509-0000	Saline Concentrate for Use with Fendall Porta Stream I									•					
32-001100-0000	Water Additive for Use with all Portable Devices										•				

Sperian Emergency Eyewash

Primary Emergency Eyewash Devices

Fendall 2000™

Item #	Description
32-002000-0000	Sterile Eyewash Station (English)
32-002000-0070	Sterile Eyewash Station (Spanish)
32-ST2050-0000	Sterile Saline Refill Cartridge for Fendall 2000

Fendall Pure Flow 1000®

Item #	Description
32-001000-0000	Eyewash Station (English)
32-001000-0022	Eyewash Station (French Canadian)
32-001000-0070	Eyewash Station (Mexican Spanish)
32-001050-0000	Saline Refill Cartridge for Fendall Pure Flow 1000
32-ST1050-0000	Sterile Saline Refill Cartridge for Fendall Pure Flow 1000
32-001052-0000	High Humidity Saline Refill cartridge for Fendall Pure Flow 1000

Fendall Porta Stream® II + III

Item #	Description
32-000200-0000	Eyewash Station (English) with Saline Concentrate
32-000200-0022	Eyewash Station (French Canadian) with Saline Concentrate
32-000200-0070	Eyewash Station (Mexican Spanish) with Saline Concentrate
32-000230-0000	Eyewash Station (English) with Water Additive
32-000230-0022	Eyewash Station (French Canadian) with Water Additive
32-000230-0070	Eyewash Station (Mexican Spanish) with Water Additive
32-000310-0000	Eyewash Station (freeze protected) with Saline Concentrate

Secondary Emergency Eyewash Devices

Fendall Porta Stream® I

Item #	Description
32-000100-0000	Eyewash Station (English) with Saline Concentrate
32-000100-0022	Eyewash Station (French) with Saline Concentrate
32-000100-0070	Eyewash Station (Spanish) with Saline Concentrate
32-000130-0000	Eyewash Station (English) with Water Additive

Fendall Flash Flood®

Item #	Description
32-000400-0000	Eyewash Station (English)
32-000400-0022	Eyewash Station (French Canadian)
32-000400-0070	Eyewash Station (Mexican Spanish)
32-000402-0000	Wire Storage Rack for Fendall Flash Flood
32-000401-0000	Saline Refill Cartridges for Fendall Flash Flood

Emergency Decontamination Shower

Emergency Decontamination Shower

Item #	Description
32-001187-0000	Emergency Shower with Carry Bag
32-001180-0000	Emergency Shower Only (Carry Bag Not Included)
32-001188-0000	Retention Pool with Carry Bag
32-001182-0000	Retention Pool Only (Carry Bag Not Included)
32-001181-0000	Carry Bag for Pool
32-001183-0000	Carry Bag for Shower

Personal Eyewash Bottles

Saline Personal Travel Bag

Item #	Description
32-000440-0000	13" x 9" x 4", Qty 1, 4 lbs.

Saline Eyewash Bottles

Item #	Description
32-000455-0000	32 oz. Bottles with Extended Flow Nozzles
32-000454-0000	16 oz. Bottles with Extended Flow Nozzles
32-000445-0000	8 oz. Bottles with User-Controlled Delivery – Drops or Stream
32-000452-0000	4 oz. Bottles with User-Controlled Delivery – Drops or Stream
32-000451-0000	1 oz. Bottles with User-Controlled Delivery – Drops or Stream

Personal Eyewash Wall Stations

Saline Wall Stations

Item #	Description
32-000460-0000	16 oz. Single Eyewash Wall Station
32-000461-0000	32 oz. Single Eyewash Wall Station
32-000462-0000	32 oz. Double Eyewash Wall Station
32-000471-0000	32 oz. Double Body Flush Wall Station

Emergency Eyewash Refills

Fendall 2000™ Sterile Saline Cartridges

Item #	Description
32-ST2050-0000	Sterile Saline Refill Cartridges for Fendall 2000

Fendall Pure Flow 1000® Sterile Saline Cartridges

Item #	Description
32-ST1050-0000	Sterile Saline Refill Cartridges for Fendall Pure Flow 1000

Fendall Pure Flow 1000 Saline Cartridges

Item #	Description
32-001050-0000	Saline Refill Cartridges for Fendall Pure Flow 1000

High Humidity Adaptors for Fendall Pure Flow 1000 Cartridges

Item #	Description
32-001052-0000	Sterile Saline Refill Cartridges for Fendall Pure Flow 1000

Fendall Flash Flood® Cartridge

Item #	Description
32-000401-0000	Saline Refill Cartridges for Fendall Flash Flood

Saline Solution

Item #	Description
32-000502-0000	Saline Solution (Premixed) for Use w/Fendall Porta Stream I, II, III

Concentrate

Item #	Description
32-000513-0000	Saline Concentrate for Use with Porta Stream II, III
32-000509-0000	Saline Concentrate for Use with Porta Stream I

Water Additive

Item #	Description
32-001100-0000	Water Additive for Use with all Portable Devices

Emergency Eyewash Accessories

Dust Cover

Item #	Description
32-000517-0000	Dust Cover for Fendall Porta Stream I, II

Reflective Covers

Item #	Description
32-000532-0000	Reflective Cover for Use with Fendall Porta Stream II
32-000531-0000	Reflective Cover for Use with Fendall Porta Stream I

Sperian Emergency Eyewash

Fluid Disposal Cart

Item #	Description
32-000511-0000	Disposal Cart for Use with Fendall Porta Stream I, II, III, and Fendall Flash Flood

Universal Eyewash Cleaning Kit

Item #	Description
32-000518-0000	Cleaning Kit for Use with All Tank-Type, Eyewash Stations

Waste Container

Item #	Description
32-001061-0000	Waste Container for Use with Universal Cart #32-001060-000

Universal Bottle Mounting Device

Item #	Description
32-000435-0000	Universal Bottle Mounting Device

Universal Eyewash Stand

Item #	Description
32-001065-0000	Eyewash Stand for Use with Fendall 2000, Fendall Pure Flow 1000, and Fendall Porta Stream I, II and III

Universal Eyewash Cart

Item #	Description
32-001060-0000	Eyewash Cart for Use with all Portable Devices

Wire Storage Rack

Item #	Description
32-000402-0000	Wire Rack for Use with Fendall Flash Flood

