

Porta Stream® II

15-Minute Emergency Eyewash Station

16-Gallon (61 liters) Model #32-000200/32-000230 Installation and Operation Manual

Unpack and Inspect

The Porta Stream II is delivered in one (1) box. Upon receipt, check the shipping box for any damage. The following items are contained in the box (please check the last page for other items that may be included for your specific model):

1. Porta Stream II Station
2. Pull Strap
3. Metal Hanging Bracket
4. Installation and Operation Manual



WARNING:

- The unit must be level for proper operation. (See “Choose a Location,” page 1.)
- The Porta Stream II may weigh over 150 lbs. (70 kg) when filled with solution. Assistance may be required when installing the unit on the hanging bracket. (See “Choose A Location,” page 1.)
- Do not add any product or material to the solution of Eyesaline Concentrate and Water. (See “Fill the Porta Stream II,” page 2.)
- Employees must be instructed in the use of Emergency Eyewash Stations. (See “Operation,” page 3.)
- This Emergency Eyewash unit is intended for the emergency use of victims of eye contamination until medical treatment is obtained. In all cases, the victim should seek medical attention immediately after flushing. (See “Operation,” page 3.)
- An individual or department must be assigned the task of checking all self-contained Eyewash units on a weekly basis. (See “Inspection and Maintenance,” page 3.)
- All eyewash devices containing Eyesaline or water with a preservative should be cleaned and refilled per solution manufacturer’s recommendations. Units containing just water need to be cleaned and refilled at least once a week. (See “Inspection and Maintenance,” page 3.)
- Use of a fluid beyond the expiration date may result in serious personal injury. (See “Inspection and Maintenance,” page 3.)
- When using any cleaning solution or disinfectant, follow the label instructions. (See “Disinfecting with the Fendall Eyewash Cleaning Kit,” page 4.)

Failure to follow and comply with all instructions and cautions stated in this manual may result in serious personal injury, serious illness, blindness or death.

Choose a Location

The ANSI Standard Z358.1-1998 requires that:

1. The unit shall be positioned with the nozzle(s) not less than 83.8 cm (33 in.) and no greater than 114.3 cm (45 in.) from the floor and 15.3 cm (6 in.) minimum from the wall or nearest obstruction.
2. Eye wash units shall be in accessible locations that require no more than 10 seconds to reach. The eye wash 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 a strong caustic, the eye wash should be immediately adjacent to the hazard.
3. Each eye wash location shall be identified with a highly visible sign positioned so the sign shall be visible within the area served by the eye wash. The area around the eye wash shall be well lighted.

The Porta Stream II Emergency Eyewash Station must be installed in an easily accessible location in the immediate area of hazard to the employee, according to ANSI Standard Z358.1-1998 requirements. The Porta Stream II may be placed on any level surface of required height, such as a table or bench (allow for proper drainage and disposal of the flushing solution). The Porta Stream II may also be mounted on a wall or post using the metal hanging bracket. The unit must be level for proper operation. (See “Warning” on page 1.)

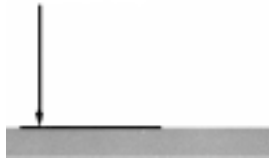
fend·all

Fendall, Inc.
Platteville, WI USA
1-401-232-1200; 800-543-4842
Part #32-003805 Rev. B

Metal Hanging Bracket



52-1/2" - 64-1/2"
(133 cm - 164 cm)
from Floor



At least two fasteners are required for the Porta Stream II hanging bracket and are not included. The installer must select fasteners that provide support for the filled unit (approximately 150 lbs. or 70 kg), plus the force of an individual leaning on the unit when in use. The fastener selection should also be determined by the type of mounting surface support at that site. (See "Warning" on page 1.)

When installing the Porta Stream II hanging bracket, the horizontal holes in the bracket must be 52-1/2" - 64-1/2" (133 cm - 164 cm) from the floor in order to have the nozzles positioned as required by ANSI Z358.1-1998. If using the Eyesaline Waste Water Disposal Cart (Fendall model #32-000511-0000), the required bracket hole height is 58" (147 cm) from the floor.

After installing the hanging bracket, hang the Porta Stream II unit by placing the handle onto the bracket. Check the nozzle height. Place the Emergency Eyewash sign (if included with your model) in a visible area to mark the location of the unit.

Fill the Porta Stream II

Self-contained units provide options for the type of flushing fluids used in the unit. A buffered isotonic solution preserved with a suitable antibacterial agent may be less irritating to the eye when used for a 15-minute flush. Tap water may contain potentially harmful bacteria, chemicals and other irritating contaminants, including rust and chlorine, that can further aggravate already injured or compromised eyes. Fendall recommends the use of Eyesaline concentrate, Eyesaline Solution or Fendall Water Preservative because extensive lab research provides solid documentation that flushing with ordinary tap water for extended periods of time, such as the 15 minutes recommended by the ANSI Standard, may damage corneal cells.

What is Eyesaline®?

Eyesaline is a buffered, preserved, saline solution that is carefully formulated to the following criteria:

1. Buffered to the same pH balance of the human eye (7.4) which is especially important in chemical splashes where the eyes' pH level has been disrupted.
2. Compounded to maintain its pH of 7.4 during all stages of use, including storage.
3. Contains a preservative to inhibit bacterial growth and is purified to eliminate contaminants, organisms and chlorine.

Eyesaline Concentrate Use

Eyesaline Concentrate is recommended for use with the Porta Stream II unit for convenient, on-site preparation of a buffered, preserved, saline solution. Depending on model purchased, Eyesaline concentrate may be included or may be purchased through your safety supply distributor.

Mixing Instructions:

Eyesaline Concentrate is formulated to be mixed with potable drinking water, in a ratio of **10 parts water to one part Eyesaline Concentrate (#32-000513)**. To prepare the 16 gallons (61 liters) of solution required to fill the Porta Stream II, you will need 14.5 gallons (55 liters) of water to mix with the 180 ounces (5.3 liters) of concentrate. For best results, use filtered water. If filtered water is not available, use potable water. The solution may be mixed directly in the Porta Stream II unit. For best results, mix in an area which is clean and free of airborne particles. Do not add any product or material to the solution of Eyesaline Concentrate and water. (See "Warning," page 1.) Premixed Eyesaline Solution is available in one gallon (3.8 liters) containers for filling the Porta Stream II, product #32-000502.

Note: If using the wall bracket mount, remove the unit from the wall bracket before filling.

1. Wear protective eyewear and gloves and follow sanitary practices during mixing.
2. Use a clean container of sufficient capacity, to mix 16 gallons (61 liters).
3. Add approximately 5 gallons (19 liters) of tap water to the container.
4. Add 1/3 of the concentrate to the container and agitate or mix thoroughly.
5. Repeat steps 3 and 4 adding sufficient water and concentrate to make a total of 16 gallons (61 liters) of solution.
6. Ensure that the nozzles and pull strap are clean and dry and that the strap is fully seated on the nozzles.
7. Pour the mixed solution into the unit.
8. If your eyewash station is equipped with a separate vent cap, replace the vent cap. Close the fill cap and attach a security device or inspection tag if desired.



Nozzle Assembly

9. Properly dispose of the concentrate bottle. Do not reuse.
10. Solution must be replaced 6 months after mixing.

Fendall Water Preservative Use

Use 1/2 oz. (15 ml) of preservative per gallon (3.8 liters) of water;

1. Wear protective eyewear and gloves and follow sanitary practices during mixing.
2. Use a clean container of sufficient capacity to mix enough solution to fill the eyewash unit. Solution may also be mixed directly into the eyewash unit.
3. Add half of the required amount of water to the container.
4. Add the appropriate amount of preservative based on station capacity. Mix or agitate thoroughly.
5. Fill the station to the manufacturer's required level.

Any remaining preservative can be stored with the cap on for 120 days after opening. Station should be cleaned and refilled every 120 days while using this product.

Operation

Employees must be instructed in the use of Emergency Eyewash stations. (See "Warning," page 1.) Studies have shown that obtaining emergency flushing within the first 10 seconds in eye emergencies is critical. It is required that training be provided to employees in each department where eye hazards exist. This training should be scheduled on a regular basis to keep both current and new employees aware of the location of all eyewash devices, as well as to reinforce the importance of obtaining immediate eye washing in emergencies.

1. The sooner the injured person can flush his eyes, the less likelihood there will be of eye damage. Seconds can make the difference in preventing serious eye injury or blindness.
2. All employees must be reminded this unit is for emergency use only; tampering with this unit or using it for non-emergency purposes may cause the unit to fail to operate properly in an emergency situation.

In an emergency, the eyes may involuntarily clamp shut and the individual may be experiencing pain, anxiety and disorientation. They may need assistance from other workers in getting to and using the eyewash station.

1. Start the fluid flow by grasping the pull strap and pulling the strap upward.
2. When the fluid is flowing, place the injured person's left hand around the left nozzle and the right hand around the right nozzle.
3. The injured person should then lower his head into the unit toward his hands.
4. When the eyes are in the streams of fluid, use the thumb and forefinger of each hand to open the eyelids. Hold eyelids open until thoroughly flushed. 15 minutes is recommended.
5. **After flushing, seek medical attention immediately.** (See "Warning," page 1.)
6. Safety and supervision personnel must be notified that the unit has been used and must be refilled.



Inspection and Maintenance

Safety Precautions:

1. When filled with flushing fluid, the Porta Stream II weighs approximately 150 lbs. (70 kg). Provide the necessary equipment or personnel to install or remove the filled Porta Stream II from the mounting bracket.
2. Install the mounting bracket so the Porta Stream II is level.
3. Read all warning notices on the concentrate bottle before mixing.
4. Wear suitable eye protection and gloves when mixing the concentrate.
5. Do not add any product or material to the solution of Eyesaline concentrate and water.

Inspection

An individual or department must be assigned the task of checking all self-contained eyewash units on a weekly schedule to ensure the unit is in proper operating condition with adequate levels of flushing fluid. Records of these weekly inspections should be kept with the unit. Eyewash units containing Eyesaline or water with a preservative should be cleaned and refilled per the solution manufacturer's recommendations. Units containing just water need to be cleaned and refilled once a week. Use of a fluid beyond the expiration date may result in serious personal injury. (See "Warning," page 1.)

NOTE: The Eyesaline Solution contains a specially formulated salt compound. There may be a white residue if solution has dried on the Porta Stream II surfaces. The white residue can be removed by wiping with a damp cloth.

To replace the flushing fluid in the Porta Stream II:

1. Drain the Porta Stream II of any remaining flushing fluid by pulling the rubber strap from the nozzles and allowing the unit to empty until there is no flow from the nozzles. Remove the Porta Stream II from the wall bracket (or level surface), open the fill cap and empty any remaining solution. (Use of the Waste Water Disposal Cart is recommended for easy collection and disposal.)
2. Rinse the unit with clean tap water, agitate thoroughly, then invert the station until the water is drained.
3. Partially fill the unit with clean tap water and allow to drain through the eyewash nozzles. If nozzle holes are blocked, they may be opened by gently inserting a small wire or pin to remove obstructions. If obstructions cannot be removed, contact Fendall, Inc., for replacement nozzles. Invert the unit to drain any remaining water.
4. Reassemble the unit and fill per the instructions under the heading “**Fill the Porta Stream II**” in this booklet.

Note: Although a thorough flushing with clean tap water may be sufficient to clean the Porta Stream II unit, for best results disinfect the unit each time the fluid is changed.

Disinfecting with the Fendall Eyewash Cleaning Kit: Product #32-000518

1. After rinsing the unit with clean tap water, partially fill the eyewash station with two gallons (7.6 liters) of clean tap water. Add the entire contents of the disinfectant bottle to the water inside the unit. Agitate thoroughly to mix the solution and wet all interior surfaces.
2. Scrub all interior surfaces with the brush provided. Wet the disposable towels with the disinfecting solution and clean the exterior of the unit.
3. Let the solution stand in the unit at least 10 minutes.
4. Allow the solution to drain completely through the nozzles, checking for even, full flow. If nozzle holes are blocked, they may be opened by gently inserting a small wire or pin to remove obstructions. If obstructions cannot be removed, contact Fendall, Inc., for replacement nozzles.
5. RINSE AND DRY THE STATION THOROUGHLY. All disinfectant must be rinsed from the unit before refilling to avoid contamination of the new flushing solution. (See “Warning,” page 1.)
6. Fill as instructed under the heading “**Fill the Porta Stream II**” in this booklet.

Alternate methods of disinfecting the Porta Stream II:

1. After the unit has been rinsed with water, prepare a disinfecting solution using a commercial disinfectant such as Amphyl (EPA Reg. #675-43), Lysol (EPA #675-19) or a solution of household bleach and water (1 ounce (30 ml) of household bleach to 2 gallons (7.5 liters) of water).
Important: When using any cleaning solution or disinfectant, be sure to follow the label instructions.
2. Allow the solution to drain completely through the nozzles, checking for even, full flow. If nozzle holes are blocked, they may be opened by gently inserting a small wire or pin to remove obstructions. If obstructions cannot be removed, contact Fendall, Inc., for replacement nozzles.
3. Do not immerse the fill cap or the pull strap in the disinfectant solution. These items should be wiped thoroughly clean with a cloth containing the disinfectant solution.
4. After the disinfectant procedure is complete, rinse the unit with tap water thoroughly before filling as instructed under the heading “**Fill the Porta Stream II**” in this booklet.

Porta Stream II Series Products

| Product Model | Includes (In addition to items listed on front page) |
|---------------------------------|--|
| 32-000200-0000 (English) | 180 oz. (5.3 liters) Concentrate, Emergency Eyewash Sign |
| 32-000200-0010 (French) | 180 oz. (5.3 liters) Concentrate, Emergency Eyewash Sign |
| 32-000200-0020 (English-Canada) | 180 oz. (5.3 liters) Concentrate, Emergency Eyewash Sign |
| 32-000200-0022 (French-Canada) | 180 oz. (5.3 liters) Concentrate, Emergency Eyewash Sign |
| 32-000200-0070 (Spanish) | 180 oz. (5.3 liters) Concentrate, Emergency Eyewash Sign |
| 32-000200-0040 | Emergency Eyewash Sign |
| 32-000230-0000 | Fendall Water Preservative, Emergency Eyewash Sign |

Parts and Accessories

| Product | Description | Product | Description |
|-----------|--|-----------|--------------------------------|
| 32-000502 | 1 gallon (3.8 Liters) premixed Eyesaline solution | 32-000102 | Pull Strap |
| 32-000513 | Eyesaline Concentrate for Porta Stream II, 180 oz. (5.3 liters), to mix 16 gallons (61 liters) of solution | 32-000105 | Wall Bracket |
| 32-001100 | Fendall Water Preservative, 8 oz. (237 ml) | 32-000107 | Emergency Eyewash Sign |
| 32-000517 | Dust cover for Porta Stream II, protects basin from dust and debris | 32-000201 | Fill Cap |
| 32-000518 | Eyewash Cleaning kit, to assist in the maintenance of the unit | 32-000203 | Nozzle Assembly |
| 32-000532 | Reflective Jacket | 32-000204 | Maintenance and Inspection Tag |
| | | 32-000511 | Waste Water Disposal Cart |
| | | 32-001060 | Universal Cart |