



**BE PREPARED FOR EYE ACCIDENTS WHEN WORKING WITH
HAZARDOUS SUBSTANCES**



Table of Contents

Tobin Eyewash Systems	1
Important Safety Features	2
Instructions	3
Types of Eyewash Systems	4-7



Tobin Eyewash Systems

Tobin's eyewash systems are a well proven, quick and safe way to wash chemicals from the eyes. This specially designed system gives the fastest possible application combined with a volume large enough for most eye accidents.

WITHIN ARMS REACH

Chemicals in the eye causes serious damage within 1-5 seconds. Washing that begins in a few seconds can be decisive in minimising eye damage. A temporarily blinded person trying to reach an eyewash a few meters away requires presence of mind, a good sense of direction and obstacle free passage. An eyewash should be within arms reach. The bottle are also very easy to open.

CONTROLLED FLOW

According to Professor Tengroth at the Eye Clinic at Saint Eriks Hospital in Stockholm, it is important that damaged eyes are washed by a soft flow. Tobin's bottle is constructed to empty under natural pressure giving a soft flow. When the bottom air vent is opened a patient cannot increase the flow by squeezing the bottle. A bottle gives approx. 3 minutes washing time.

SHELF LIFE

As the bottles are disposable, costly refill routines are unnecessary. The contents of the bottle have a 3 year shelf life. Each bottle has an expiry date clearly visible.

DUST COVERS

A simple plastic bag accompanies each bottle. It keeps the bottles clean in dusty/dirty environments.

VOLUME

Uninterrupted washing over a period is particularly important. The 5 bottle stand gives approximately 15 minutes washing. Further bottles can be taken from other stands if required.

TRANSPORT

Bottles can easily be removed from the stand and taken along during transportation to the doctor. It is very easy to open the bottles by hand. It is possible to control the flow by placing the thumb over the bottom hole.

LOW PRICE

The cost of the wall-stand with 5 bottles is low, making it possible to give each danger spot its own eyewash station.

STERILITY

The regulation governing sterile liquids is rigorous. The bottle cannot contain any bacteria during its shelf life. When a bottle is opened the contents must be used within a few hours or thrown away. Bottles cannot be refilled and as such are designed to stop people saving unused liquid or refilling the bottle with other liquid. Open bottles cannot be replaced in a stand.

EASY TO OPEN

The bottles are easy to open as is illustrated on each individual bottle and on most stands.



TOBIN 
EYEWASH SYSTEM

Important Safety Features

BOTTLE CAP/AIRVENT

The bottle hangs by its cap. To open simply break off the cap. An unopened bottle can be removed/replaced in the stand at will. An open bottle cannot be replaced in the stand.

NO MECHANICAL PARTS

The blow-moulded bottle has no moving or mechanical parts which can malfunction. The bottle is simple to open and easy to use.

DISPOSABLE

The fact that the bottle is disposable is a very important safety feature. Sterile liquid must not be saved in an open bottle. The Tobin bottle cannot be refilled. A safe sterile eyewash container must not be re-useable.

INSTRUCTIONS

Clear, simple instructions for use on each bottle & stand in your own language.

DIRECTIONAL ARROW

An arrow is engraved on the bottle. A blinded person can easily follow the arrow with their thumb and open the bottom airvent.

BOTTOM AIRVENT

When the bottom airvent is activated it lets air into the bottle and insures the eye is washed by a soft continuous flow. The flow can be stopped, to allow blinking and eye movements, by placing the thumb over the bottom hole.

EYE SUPPORT RING

Facilitates prolonged washing and washing during transportation to a doctor.

THE FLOW

The eye is washed by a soft flow consisting of 6 tiny streams. A damaged eye must not be washed with a hard/sharp jet.

THE OPEN BOTTLE

The bottle is designed to stop people saving unused liquid or refilling the bottle with other liquid. When empty, the bottle has a hole at both ends making it unsuitable for further use.

EXPIRY DATE

Each bottle shows the recommended expiry date.

ROUNDED BOTTOM

Tobin's eyewash bottle has a round bottom and cannot stand alone. This is a particularly important safety feature which removes the temptation to take bottles from the stand and place them close to bottles with other contents. Mix-ups can never occur. It is important everyone KNOWS where the bottles are when an accident occurs.

The bottle contains 1 litre sterile saline solution 0.9 %.



Instructions

Eye accidents occur without warning. Common to all accidents are acute pain and sense of blindness. An intense burning sensation makes it feel as if the eyes are on fire. We asked Professor Tengroth at the Eye Clinic at Saint Eriks Hospital in Stockholm how quickly washing should begin and how long it should continue. He replied that it is extremely important to begin washing immediately. Seconds are decisive. A flow of liquid is important as the purpose is to dilute and wash the chemicals out of the eyes.



DEGREASING AGENTS 1 - 3 MINUTES

- Wash not less than 2-3 minutes. Chemicals such as benzene, toluol etc. cause pain and burning in the eye. The eye becomes red and the tears flow.
- Course of action: Begin washing at once and continue until the eye is comfortable again. These chemicals seldom cause serious damage.

ACIDS 2 - 4 MINUTES See a doctor

- Wash up to 5 minutes. When acid reaches the eye, damage begins within 5 seconds. The reaction in the eye is severe. The acid eats into the soft eye. The combination of acid and tears causes some dilution but damage can be considerable. In time tissue and proteins coagulate and the acid stops corroding in the eye. At this stage the injury does not get worse even if no treatment is applied. The acid is said to remain on the surface. The damage can be very considerable.
- Course of action: Washing must begin within 5 seconds. Speed is more important than anything else. Every second's delay aggravates the situation. Damage increases by the second.
- Washing period: The damage seldom increases after 1-2 minutes. Washing for 3 minutes should be sufficient. However, to restore a feeling of comfort a further 2 minutes is recommended. These time periods apply only if a predominant part of the liquid makes contact with the eye. The patient should always see a doctor.

ALKALINES 10 - 20 MINUTES Wash during transport to a doctor

- Wash for 10-20 minutes - should always see a doctor. Alkaline substances such as lye, caustic soda, lime, cement, ammoniac etc. cause a very aggressive reaction in the eye. The reaction time is even shorter than the one for acids. The importance of speed in beginning washing cannot be sufficiently stressed. All alkaline substances begin eating into the eye immediately. Alkalines "never" stop corroding in the eye. They must be washed out of the eye. Without treatment the damage will be very extensive and irreversible. Ammoniac has been found in the inner eye after only 25 seconds.
- Course of action: Lightning fast treatment and prolonged washing are extremely important. Eyewashing equipment should be within arms reach and must be designed so that washing can continue during transportation to a doctor. A 10-20 minutes washing period is recommended. In alkaline cases only a doctor can decide when it is safe to discontinue washing.

Types of Eyewash Systems

STATIONARY STANDS



DESCRIPTION

5 x 1 Litre eyewash bottles in a wall-stand for stationary work places. Supplied complete with bottles, wall-stand and wall screws. Provides full 15 minute flush.

MEASUREMENTS

39cm (H) x 45cm (W) x 10cm (D)



DESCRIPTION

2 x 1 Litre eyewash bottles in a wall-stand. Suitable when space is a problem. (Supplied complete with bottles, wall-stand and wall screws.)

MEASUREMENTS

39cm (H) x 20cm (W) x 10cm (D)

Types of Eyewash Systems

MOBILE STANDS



DESCRIPTION

2 x 1 Litre eyewash bottles in a stand for mobile units such as trucks, boats, trains etc. (Supplied complete with bottles, wall-stand and wall screws.)

MEASUREMENTS

34cm (H) x 20cm (W) x 10cm (D)

DUST PROTECTED CABINET



DESCRIPTION

2 x 1 Litre eyewash bottles in a dust protected cabinet suitable for all work places. Supplied complete with bottles, wall-stand and wall screws.

MEASUREMENTS

25cm (H) x 25cm (W) x 10cm (D)

Types of Eyewash Systems

WALL STAND - BUFFER SOLUTION



DESCRIPTION

2 x 1 Litre eyewash bottles in a wall-stand. Suitable when space is a problem. (Supplied complete with bottles, wall-stand and wall screws.) **Contains: Buffered solution with a neutralising effect on acidic chemicals.**

MEASUREMENTS

39cm (H) x 20cm (W) x 10cm (D)

POCKET EYEWASH FLASK



DESCRIPTION

If it is not practical to have a eyewash station within arms reach, it is possible to carry a personal Pocket Eyewash Flask in the breast pocket. The pocket flask is not sufficient in itself to wash chemicals from the eyes, but can be used on the way to a proper eyewash station.

MEASUREMENTS

17cm (H) x 8cm (W) x 2cm (D) (Weights 200 grams)

Types of Eyewash Systems

REPLACEMENT BOTTLES



DESCRIPTION

Includes 2 x 1 litre bottles - Saline Solution

MEASUREMENTS

39cm (H) x 20cm (W) x 10cm (D)



DESCRIPTION

Includes 5 x 1 litre bottles - Saline Solution

MEASUREMENTS

39cm (H) x 45cm (W) x 10cm (D)



DESCRIPTION

Includes 2 x 1 litre bottles - Buffer Solution

MEASUREMENTS

39cm (H) x 20cm (W) x 10cm (D)



Dalton International Limited

Physical Address: Unit 6, 23 Ash Road, Wiri, Auckland, 2104

Postal Address: PO Box 259041, Botany, Auckland, 2163

Tel: 0800 323 223 or +64 09 263 3142 | Web: www.daltoninternational.co.nz | Email: sales@dilnz.co.nz