



**First Aid for  
your eyes**



A close-up, high-resolution portrait of a middle-aged man with a full, grey and black beard and mustache. He has light blue eyes and is looking directly at the camera with a neutral, serious expression. The background is blurred, suggesting an indoor setting.

## Learn more about First Aid for eyes

Having the correct First Aid equipment is particularly important at workplaces where there is a high risk of eye injuries, for example **construction sites, warehouses, commercial kitchens, industry and laboratories**. Common causes of injuries are **exploding batteries, splashes from lye, ammonia, cement, lime, dishwasher detergents, cleaning agents, some laundry detergents, degreasing agents, paint, washing soda and adhesives**. Metal filings, dirt and dust should also be immediately flushed away to make sure they do not get stuck in your eye. If metal filings get stuck in your eye, they cannot be flushed away but need to be removed by a doctor.

If you or someone around you gets a hazardous substance in the eye, rapid access to First Aid is crucial. This brochure helps you learn more about First Aid for eyes.



## Saving the eye

1

### Start rinsing the eye immediately.

The effect is the greatest during the first seconds.

2

### Rinse thoroughly and with plenty of fluid.

The eye must be open during rinsing. Use your fingers to help keep the eye open.

3

### Rinse for a long time.

Rinse for at least 15 minutes. Use several bottles of eye wash or continue rinsing at a plumbed-in eye wash unit.

### **Remember that if you injure your eye, it must always be examined by a doctor!**

Take several bottles of eye wash with you for continued rinsing on the way to the hospital. If you do not have access to First Aid products, use lukewarm water and a cup.

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***"The most important thing when you get a corrosive substance in your eye is to start flushing the eye immediately. It is a case of seconds after the injury has occurred and it is important to keep going for a long time. This is absolutely crucial to whether the eye and vision survive or not."***

Anders Behndig, professor and senior consultant at Umeå University Hospital in Sweden.



# Using the right equipment increases the chance of saving a person's eye

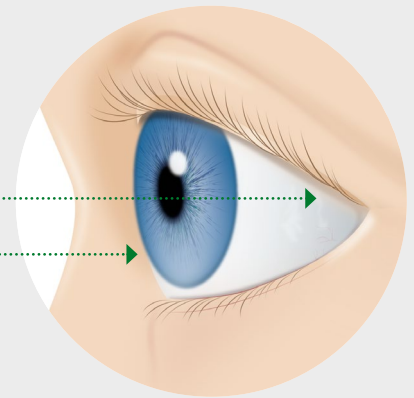


If alkalis or acids get into an eye, the pH value of the eye changes and corrosion starts.

If there has been an accident, the first thing you need to do is to quickly start to flush away the harmful chemicals and restore the pH value of the eye. This is the reason why Cederroth's eye wash is buffered. It acts as a shock absorber and restores the pH value to the eye's normal pH more effectively than normal sodium chloride solution.

**Alkalis** penetrate more deeply into the eye's tissue and can cause serious damage to the eye, which is often permanent.

**Acids** cause corrosive injuries on the outer parts of the eye and can normally be treated.



**Alkaline substances are behind the majority of all corrosive injuries**

## Examples of alkalis:

- Lye
- Cement
- Ammonia
- Washing soda
- Dishwasher detergent

## Examples of acids:

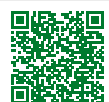
- Battery acid (sulphuric acid)
- Hydrochloric acid
- Phosphoric acid
- Acetic acid

## The flow of liquid is crucial

Anders Behndig, professor and senior consultant at Umeå University Hospital in Sweden is an expert on the front part of the eye.

– The amount of liquid that is flushed into the eye is of great importance to how quickly a corrosive liquid is diluted and the PH is normalised. The flow of liquid is also important for the purely mechanical removal of the corrosive liquid in the eye, especially if the liquid contains solid particles, which is not unusual. The high flow of liquid cannot be achieved with, for example, spray bottles and the like, but a stronger continuous flow of liquid is required to achieve the intended affect, says Anders Behndig.

Scan the QR code and read more what the eye expert says.





# Neutralising eye wash is more effective

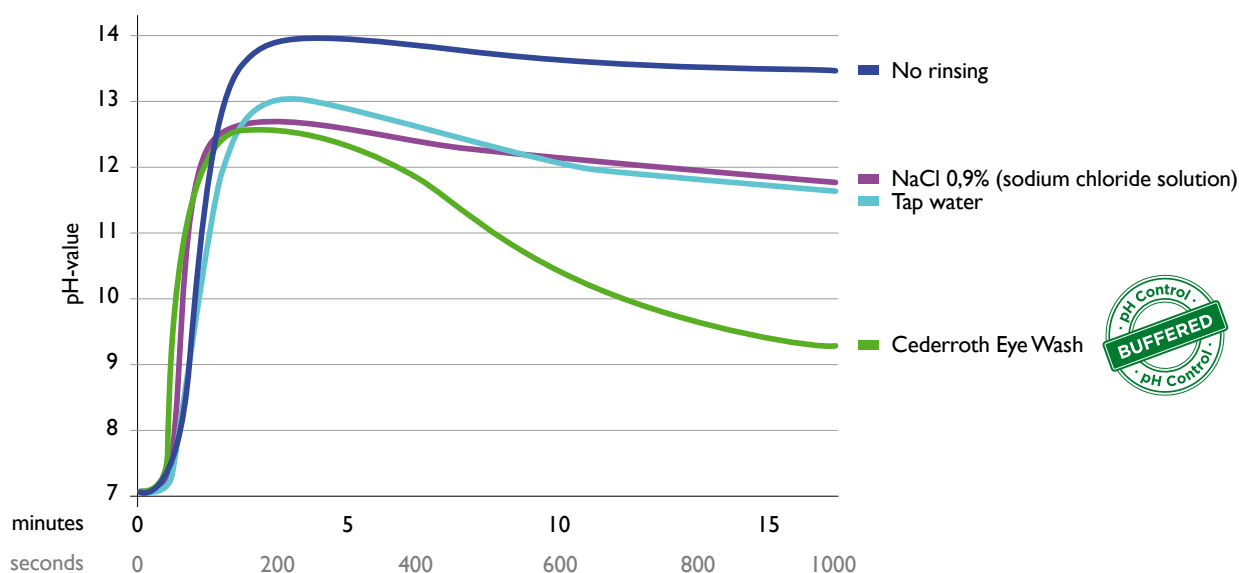
Cederroth eye wash is proven more effective for alkali and acid splashes.\*

Cederroth's buffered liquid actively brings the pH value back to neutral again, unlike an unbuffered eye wash, which simply dilutes and rinses. The pH value of the eye is neutral (pH 7). Acids have a low pH value and alkalis have a high pH value. Cederroth Eye Wash has been recommended by eye specialists in a study to compare the effectiveness of different rinsing liquids, as it has a neutralising effect.<sup>#</sup> Cederroth Eye Wash complies with the requirements in European Standard SS-EN 15154-4.

Buffered = Neutralising

## Cederroth buffered eye wash is recommended by eye specialists

pH value in the eye during 15 minutes of rinsing  
(after 20 seconds of exposure to lye (2M NaOH) )



<sup>#</sup> Source: Rihawi et al., Graefe's arch. Clin. Exp. ophtalmol. (2006) 244:845-854

\* The effect is generally stronger on alkalis than acids.

CEDERROTH EYE WASH

# A better eye wash both inside and outside

It is always crucial to start rinsing the eye immediately and with the right flow of water to remove the hazardous substance as quickly as possible and to limit injury to the eye. The function of the bottle is important. Cederroth Eye Wash is designed to provide quick and effective help in an emergency.

## Easy to open

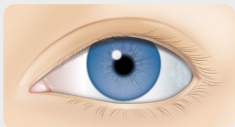
Simply open the bottle by twisting the green cap firmly clockwise or anti-clockwise. If the bottle is in the wall bracket, it opens the moment you twist it from the bracket. The size of the bottle makes it easy to grip.

## Clear and simple illustrations

## Proven to be more effective for alkali and acid splashes\*

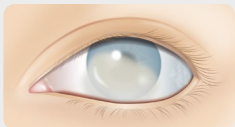
Cederroth's buffered liquid helps to bring the pH value back to neutral again, unlike a normal sodium chloride solution or water, which simply dilutes and rinses.

## A safe and simple choice – 100% phosphate-free



Healthy eye.

When every second counts, there is no time for hesitation. If you have an accident with a substance that contains calcium (for example, cement, concrete or lime), you can safely rinse with Cederroth Eye Wash as it is 100% phosphate-free.

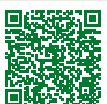


Eye with Corneal calcification.

With a eye wash containing phosphate, there is a risk of corneal calcification – a side effect where phosphate in the liquid reacts with calcium and forms an insoluble white precipitate that further damages the eyes.

## Study warns against phosphate buffered eye wash#

In recent years, multiple reports have shown the danger of using phosphate buffered eye wash to treat corrosive damage to the eye. Even after only 2 minutes of rinsing with a phosphate buffered eye wash, the eye is at risk of permanent damage.



Scan the QR code and read more!



**Unique  
design!**

### **The eye cup helps to keep the eye open during rinsing**

A colleague can check that the eye is open by looking through the transparent cup.

### **The integrated eye cup guides the liquid towards the eye without any unnecessary waste**

### **Generous flow of liquid for 1.5 minutes**

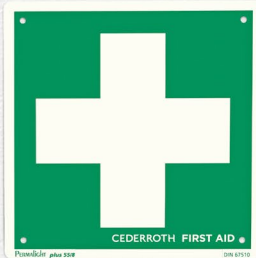
The bottle is designed to rinse the eye with a generous flow of liquid for around 1.5 minutes. Make sure you have more bottles at hand to rinse for a longer period of time, at least 15 minutes after exposure to corrosive substances.



\* The effect is generally stronger on alkalis than acids.

# Schrage N.F., Abu Sabah S., Hermanns L., Panfil C., Dutescu R.M. (2019) "Irrigation with phosphatebuffered saline causes corneal calcification during treatment of ocular burns". Burns 45:1871-1879





# Location and signs are important when every second counts

Ensure that your workplace is prepared in case of an accident and that everyone is informed about the location of the First Aid equipment, as time is crucial in saving the eye.

## Visible and easy to access

Cederroth's fluorescent signs are made of hard plastic and glow in the dark after being charged by daylight or another light source. Double-sided for mounting on a wall as a projecting wall sign or for hanging from the ceiling.

## Remember!

Place the eye wash bottles in areas of the workplace where there is the highest risk of accidents, so that you can start rinsing as quickly as possible. The rule of thumb is within arm's length!

## 4.5 year shelf life!

Cederroth Eye Wash has one of the longest shelf lives on the market for these kinds of products, which saves money and improves safety.



## Have more bottles ready

To be able to rinse for a long period of time and to take them with you on the way to the hospital.



15 min





# What are the risks at your workplace?

It is particularly important for procedures to be in place to deal with emergencies at workplaces where there is a high risk of eye injuries.

Common causes of injuries are **exploding batteries, splashes from lye, ammonia, cement, lime, dishwasher detergents, cleaning agents, some laundry detergents, degreasing agents, paint, washing soda and adhesives**. Metal filings, dirt and dust should also be immediately flushed away to make sure they do not get stuck in your eye. If metal filings get stuck in your eye, they cannot be flushed away but need to be removed by a doctor.

## Examples of risky workplaces:



Construction sites



Cleaning Companies



Warehouses



Commercial Kitchens



Laboratories



Workshops & Industry

# First aid for different workplaces and needs



## Cederroth Eye Wash REF 725200

2 (x 500 ml) sterile isotonic borate buffered sodium chloride solution without preservatives for single use.

Bottle dimensions: Ø 6.5 x 23.5 cm.

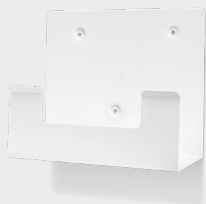
Shelf life 4.5 years.



## Cederroth Eye Wash Case REF 51011042 (Formerly REF 7255)

Includes 5 bottles (x 500ml) of Cederroth Eye Wash. Can be hung on a wall with wall bracket (REF 51011041).

Dimensions: W 43 x H 32 x D 10 cm.



## Wall Bracket REF 51011041

Wall Bracket for Cederroth Eye Wash Case (REF 51011042). By using the wall bracket the case will have a designated place.



## Cederroth Eye Wash Cabinet REF 51011040

A compact dust and water protected Eye Wash Cabinet with two bottles of Cederroth Eye Wash. Easy to fit even in small spaces. Transparent lid for high visibility. Bottles will open automatically when twisted out of the brackets to enable immediate rinsing. Dimensions: W 19 x H 30 x D 9 cm.

### Content:

2 x 500 ml Cederroth Eye Wash (REF 725200)  
1 Instruction Sign



Cederroth Eye Wash  
is easily opened  
with one hand.



## Cederroth Eye Wash Station REF 721500

The Eye Wash Station is designed to enable you to get help as quickly as possible. The station has space for 2 bottles which automatically open when you twist them out of their brackets. Dimensions: W 29 x H 56 x D 12 cm.

### Content:

2 x 500ml Cederroth Eye Wash (REF 725200)  
1 Salvequick Plaster Dispenser including  
45 Plastic Plasters (REF 6036)  
40 Textile Plasters (REF 6444)  
1 Eye Wash Instructions  
1 Refill key



## Cederroth Wall Bracket REF 7200

For Cederroth Eye Wash 500 ml (REF 725200). Comes with a fluorescent instruction sign. Dimensions: W 9 x H 27 x D 7 cm.

## Strap For Wall Bracket REF 7205

Provides additional support when the wall bracket is in a shaky environment, for example in lorries or trucks.





**A pocket-sized personal eye wash bottle for immediate assistance when working on the move.**



#### **Cederroth Eye Wash Pocket Model REF 7221**

235 ml sterile isotonic borate buffered sodium chloride solution without preservatives for single use.

Dimensions: W 6,5 x H 16 x D 4,5cm.

Shelf life 4.5 years.

#### **Cederroth Holster REF 720300**

Green nylon holster with a belt loop for Cederroth Eye Wash Pocket Model (REF 7221). Dimensions: W 8 x H 16 x D 4.5 cm.



#### **Cederroth Heating Cabinet REF 790400**

This heating cabinet has been designed for storing two bottles of Cederroth Eye Wash in cold environments. The cabinet maintains the temperature of the eye wash solution at +20°C, even if the temperature outside is as low as -20°C. The cabinet is made of insulated, durable and chemically-resistant EPP and has a thermostat heating element made of aluminium. It works automatically with 12V and 24V without the need for any other equipment (230V with a transformer). Plug for cigarette lighter sockets in cars and lorries. Voltage guard. Tested for electrical safety and CE-labelled. Eye wash must be ordered separately (REF 725200).

#### **Accessories:**

Cederroth Transformer REF 790500, Double-insulation to withstand the cold.



#### **Sign First Aid Cross REF 1738**

Double-sided and fluorescent. 20 x 20 cm.



#### **Sign Eye Wash REF 1740**

Double-sided and fluorescent. 20 x 20 cm.

#### **Sign Holder REF 1750**

Self-adhesive plastic sign holder for projecting wall signs.

**Don't forget to supplement with signs that clearly show where the eye wash is, when every second counts.**



First Aid for everyone. Everywhere.



Scan the QR code to see an instruction film  
about Cederroth Eye Wash.

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