

La Diphotérine®:

The chemical burn is a part or an entire destruction of the molecules, the cells or the structure of the skin due to an irritant or corrosive chemical product.

The importance of the tissues modification will characterize the degree of the burn.

Mechanism of the chemical burn

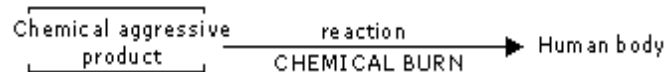
1- Which products will entail a chemical burn?

The corrosive and irritant products represent the two categories of chemical products with a hazardous criterion, able to provoke a chemical burn after a contact with the eye or the skin.

Some of them can represent a double hazard because of an association of a generalised toxic action with a primary corrosive attack (see hydrofluoric acid)

2- The mechanism

Corrosives and irritants can create an exchange between the skin or the eye components which entails a chemical burn.



This exchange is done according to 6 kinds of aggressive chemical reactions : acid, basic, oxydation, reduction, chelation of calcium or magnesium, solvation.

3- Steps of the chemical burn

The mechanism of the chemical burn is made by 3 steps:

- the contact: origin of the burn
- the penetration
- The reaction that constitutes the burn.

Depending on the nature of the product, we have from a few seconds to a few minutes to interfere efficiently, between the contact and the reaction.

4- Factors that influence the seriousness of the burn

- nature of the product
- concentration
- Length of contact
- temperature of the aggressive product

As a conclusion, to decontaminate efficiently all kind of chemical splashes, it is important to:

- 1- remove the product that is on the surface to avoid more penetration.
- 2- stop the 6 kinds of aggressive chemical reactions thanks to a polyvalent product
- 3- be able to stop the penetration of the aggressive product inside the tissues.



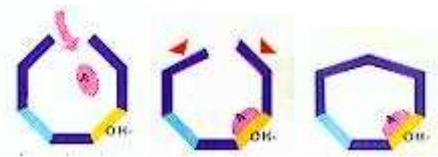
CHEMICAL FACT:

According to the mechanism of the chemical burn, we were able to notice that to decontaminate, it is necessary to

- remove the product on the surface to avoid more penetration.
- stop the 6 kinds of aggressive chemical reactions thanks to a polyvalent product
- to be able to stop the penetration of the aggressive products inside the tissues.

1- Diphotérine® looks like a liquid and meets the expectations of the necessary rinsing of the surface like the classical rinsing solutions.

2- Diphotérine® is an amphoteric and chelating molecule with at least one site able to capture each kind of the 6 possible reactions (acid, base, oxydation, reduction, solvation, chelation). The polyvalence is one of the essential advantages of Diphotérine®



*The amphoteric fixes The amphoteric imprisons
attracts the acid it to its basic site acid and makes it inoffensive*



*The amphoteric fixes The amphoteric imprisons it
attracts the base it to its acid site and makes it inoffensive*

3- Diphotérine® is an hypertonic solution which permits thanks to the osmotic pressure to attract outside the product that has already penetrated into the tissues;

The combination of these three properties allows Diphotérine® to entirely decontaminate the chemical splash, inside and outside the tissues, in a polyvalent way in order to avoid every possible sequelae due to this kind of accident.

MATERIAL CHOICE- Presentation of the risky areas



[Mural Eyewash](#)

[SIEW](#)

[Portable Eyewash](#)

[MINI DAP](#)

[DAP](#)

Control and research laboratory



Maintenance



Transport of chemical products



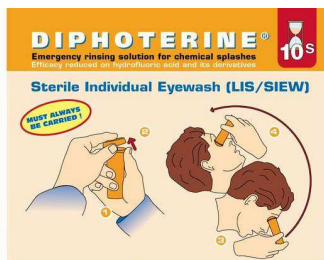
Workshops



Storage and unloading areas



Sterilised Individual Eyewash SIEW



To be used within the first 10 seconds following the accident

- Grip the unit in one hand
- Ease the cap off with the thumb and remove it with the other hand
- Carefully position the ergonomically shaped aperture to the eye
- Tilt the head backwards
- Allow the fluid to wash over the open eye
- Use the total contents.

Always report the accident and seek medical attention

PREVOR
ANTICIPATE AND SAVE
Tél. : 01 30 34 76 76

Available on our website
<http://www.prevor.com>

Advantages

Light and small dimensions

Easy to identify

Easy and ready to use

Permits a quick action

The ergonomic eyecup facilitates the eye opening

Soft and autonomous rinsing without pressure

Sterile solution

Sealed to assure the integrity of the system

Easy control of the rinsing efficiency : complete and sole use

Waterproof and compact

Does not require a specific installation and maintenance

EC certification

Characteristics

Supplier

PREVOR Company
95760 Valmondois
(33) 01-30-34-76-76

Sizes

Height : 115 mm
Diameter : 50 mm

Capacity

50 ml

Weight

68g.

Shelf-life

2 years.

Content

Diphotérine®.

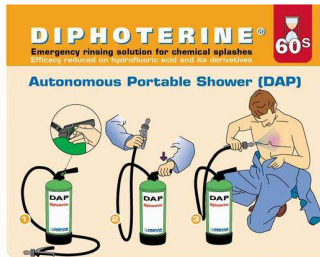
Use

One eye.

Delay to start the rinsing

Maximum 10 seconds.

AUTONOMOUS PORTABLE SHOWER DAP



To be used within the first 60 seconds following the accident

- 1 Remove the safety pin
- 2 Push down the lever on top
- 3 Remove contaminated clothes
- 4 Squeeze the handle
- 5 Spray the contaminated area
- 6 Use the total contents.



Always report the accident
and seek medical attention

PREVOR
ANTICIPATE AND SAVE

Available on our website
<http://www.prevor.com>



Advantages

Easily identifiable, the color of the DAP is green to make the difference with the fire extinguisher.

To be used like an extinguisher as a consequence does not entail a specific training.

Ready to use, permit a quick action

A soft and micronised spray that wets a lot to permit a rinsing without trauma and a perfect distribution of the solution.

The injured person can use the DAP alone.

Long flexible that permits a complete rinsing of the body.

Transportable. It permits the first aider to be protected as he will not be in contact with the splashed parts of the injured person.

The system can be used when the DAP is laying.

Easy control of the rinsing efficiency : complete and sole use.

Sterile solution.

The leading insures the integrity of the system.

Does not require a specific use and maintenance (does not require a feed, piping or floodgate system, no more problem of leak).

The DAP can always be transferred for the modulable work shops.

Can be stocked in a protective box or in an anti freeze protective box.

Refillable with the possibility of a maintenance contract.

EC certification

Characteristics

Supplier

PREVOR Company
F-95760 Valmondois
+ 33-1-30-34-76-76

Sizes

640 * 220 * 200 mm.

Capacity

5 litres.

Weight

11Kg.

Propellant

Carbon dioxide (CO₂).

Shelf-life

2 years.

Content

Diphotérine®, Hexafluorine®,

Use

The entire body surface.

Delay to interfere

Maximum 1 minute.

MINI DAP



DIPHOTERINE®
Emergency rinsing solution for chemical splashes
Efficacy reduced on hydrofluoric acid and its derivatives
60s

Mini and Micro DAP



To be used within the first 60 seconds following the accident

- ➊ Remove the cap
- ➋ Remove the contaminated clothes
- ➌ Press on the diffuser
- ➍ Aim the spray at the affected area
- ➎ Use the total contents.

Always report the accident and seek medical attention

PREVOR
ANTICIPATE AND SAVE
Phone : +33 1 30 34 76 76 - Fax : +33 1 30 34 76 75

Available on our website
<http://www.prevor.com>

Advantages

Light and small dimensions.

Easy and ready to use.

Permits a quick action.

A soft and micronised spray that wets a lot to permit a rinsing without trauma and a perfect distribution of the solution.

Sterile solution.

Easy control of the rinsing efficiency : complete and sole use.

Does not require a specific installation and maintenance.

EC certification.

Characteristics

Supplier

PREVOR company
F-95760 Valmondois
+ 33-1-30-34-76-76

Sizes

Height : 220 mm
Diameter : 50 mm.

Capacity

200 ml.

Weight

290g.

Propellant

Nitrogen.

Shelf-life

2 years.

Content

Diphotérine®

Use

Hand and forearm, face, thigh ...

Delay to interfere

Maximum 1 minute.

MICRO DAP



To be used within the first 60 seconds following the accident

- 1 Remove the cap
- 2 Remove the contaminated clothes
- 3 Press on the diffuser
- 4 Aim the spray at the affected area
- 5 Use the total contents.



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and seek medical attention



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ANTICIPATE AND SAVE
Phone : +33 (0)3 34 51 76 11 - Fax : +33 (0)3 34 51 76 12

Available on our website
<http://www.prevor.com>

Advantages

Light and small dimensions.

Easy and ready to use.

Permits a quick action.

A soft and micronised spray that wets a lot to permit a rinsing without trauma and a perfect distribution of the solution.

Sterile solution.

Easy control of the rinsing efficiency : complete and sole use.

Does not require a specific installation and maintenance.

EC certification

Characteristics

Supplier

PREVOR Company
F-95760 Valmondois
+ 33-1-30-34-76-76

Sizes

Height :118 mm

Diameter : 40 mm.

Capacity

100 ml.

Weight

200g.

Propellant

Nitrogen.

Shelf-life

2 years.

Content

Diphotérine®

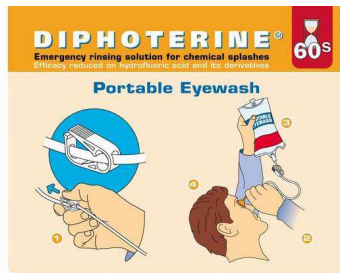
Use

Hand, cheek

Delay to interfere

Maximum 1 minute.

PORTABLE EYEWASH



To be used within the first 60 seconds following the accident

- 1 Unlock the safety clip
- 2 Position the ergonomically shaped aperture to the eye
- 3 Position the eyewash higher than the eye
- 4 Tilt the head backwards
- 5 Allow the fluid to wash over the open eye
- 6 Use the total contents



Always report the accident and seek medical attention

PREVOR
ANTICIPATE AND SAVE
Phone : + 33 1 30 34 76 76 - Fax : + 33 1 30 34 76 70

Available on our website
<http://www.prevor.com>

Advantages

Light, flexible with small dimensions.

Easy and ready to use.

Permits a quick action.

The ergonomic eyecup facilitates the eye opening.

Soft and autonomous rinsing without pressure.

Sterile solution.

Easy control of the rinsing efficiency : complete and sole use.

Does not require a specific installation and maintenance.

EC certification

Characteristics

Supplier

PREVOR Company
F-95760 Valmondois
+33-1-30-34-76-76

Sizes

Height : 200 mm (without pipe)
Widtyh : 100.

Capacity

500 ml.

Weight

560g.

Shelf-life

2 years.

6 months after having prepared the Portable Eyewash.

Content

Diphotérine® or Hexafluorine® or
Washing Solution®.

Use

One eye.

Delay to start the rinsing

Maximum 1 minute.

MURAL EYEWASH



Advantages

Fix and easily identifiable.

Easy and ready to use.

Permits a quick action without help.

The ergonomic eyecup facilitates the eye opening.

Soft and autonomous rinsing without pressure.

Sterile solution.

Easy control of the rinsing efficiency: complete and sole use.

Transparent and resistant glass bottles.

Easy to fix and modulable.

The Eyewashes are available in different variants:

- Anti dust with a door or without door,
- Inox or stainless steel,
- Anti freeze system.

Watertight system, meet the industrial expectations in terms of hygiene and tidiness.

Refillable with the possibility of a maintenance contract.

Does not require a specific installation and maintenance (does not require a feed or draining system, no more problem of leak).

Mural Eyewashes are independent and as a consequence easy to transfer for the modulable work shops.

EC certification



Characteristics

Supplier

PREVOR company
F-95760 Valmondois
+ 33-1-30-34-76-76

Sizes

Height : 325 mm
Width : 385 mm.

Capacity

twice 500 ml.

Shelf-life

2 years.
6 months after having prepared the bottle.

Content

Diphotérine®, Hexafluorine®,
Washing Solution®.

Use

One eye.

Delay to start the rinsing

Maximum 1 minute.

FAQ :Diphotérine®

- Quick action - Never delay the rinsing of the chemical splash no matter the reason

This factor is determining to avoid any after-effects. We will have to impede that the products penetrates and creates lesions (see the mechanism). The length of contact between the product and the tissues must be the shortest possible.

2 - It is fundamental that the decontamination system is located close to the risky places or at the disposal of the mobile staff (Eyewash or spray in the safety case).

Our experts can travel to study with you the setting up of the Prevor products in your plant.

3 - The material has to be accessible and the place must be known by the staff exposed to the chemical risk

If the length of reaction of the persons or the first aiders is delayed for several reasons, the quantity of Diphotérine® or Hexafluorine® that is necessary to decontaminate will be more important than the quantity available in the individual products because it is necessary to extend the rinsing (3 to 5 times the length of contact with the aggressive chemical)

4 - For caution measure, it is recommended to have one or several stations with a more important rinsing capacity, like the Mural or Portable Eyewash (500 ml) for the eyes or a DAP (5l) for the body.

5 - In case of a splash on the body, it is fundamental to undress the person.

The person has a risk of maceration if he/she keeps a contaminated clothes that multiplies the caustic effect of the product, extends dangerously the length of contact and hampers the action of Diphotérine® or Hexafluorine®.

6 - The rinsing has to be automatic, a training must be set up in the company (Prevor has created a training module to meet this specific need) in order to be sure that in case of emergency, the victim or the first aider will proceed to the right first aid measures without any hesitation.

The pain relief does not indicate the end of the rinsing. Indeed a non sufficient rinsing can leave a small part of the chemical product that will be sufficient to create a delayed inflammation 24 or 48h later.

Diphotérine® or Hexafluorine® has to be used entirely and in the intervention delay that is recommended.

7 - The use of water as a first rinsing before Diphotérine® is advised against if possible. Water removes the chemical product on the surface but its hypotonic criterion facilitates the penetration of dangerous residues. More Diphotérine® will be necessary afterwards to extract the product inside the tissue and the efficiency of the rinsing with Diphotérine® will risk to be decreased entailing thus risks of secondary effects.

8 - In case of a splash in the eye, the treatment with Diphotérine® can entail a light and temporary dryness sensation in the eye. A secondary rinsing with the Washing Solution from Prevor will give a comfort sensation by reestablishing the physiological balance of the eye.

9 - Finally, no matter the quality of the rinsing, a medical advice is necessary.