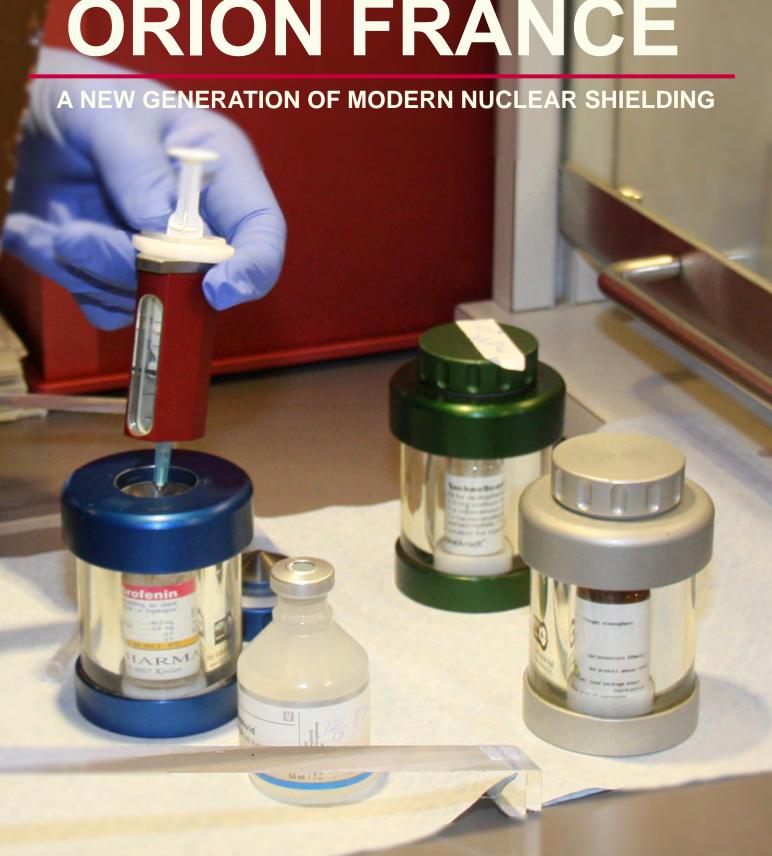
# ORION FRANCE



### GLASS VIAL SHIELDS

Developed for low, medium-energy isotopes, beta protection and Lu-177

- LEAD GLASS OFFERS CLEAR 360° VISIBILITY
- ACCOMMODATES MOST VIALS
- SMALL MECHANICAL DIMENSIONS, SMALLEST ON THE MARKET
- LIGHT-WEIGHT
- BESPOKE DIMENSIONS ALSO AVAILABLE, PLEASE GET IN TOUCH
- METAL: ANODISED ALUMINIUM

The high density (5.2 g/cm³) lead Glass Vial Shield protects the user from hand and eye exposure, when inspecting vials before aspiration. The new vial glass offers complete 360° visibility at all times. The vial glass is shielded for low-energy isotopes. Tungsten components within the vial shield allow for the small physical dimensiona and light weight.

The lead glass has a unique magnetic lift-off top for needle injection. The enclosed vial adaptors ensure that the vial is always correctly positioned and aligned.



#### LOW-ENERGY LEAD GLASS

THE LOW-ENERGY LEAD GLASS IS OFFERED IN TWO DIFFERENT THICKNESSES, 4 mm and 6,4 mm PB EQUIVALENT.



#### **SPECIFICATION**

- Lead equivalency 5,2 g / cm<sup>3</sup>
- Accommodates vials from 5 to 30 ml
- Standard colours: Red and aluminium
- Available in other colours at extra cost

Part no colours:

10.001.01 = red

10.001.02 = blue

10.001.03 = green

10.001.04 = aluminium

10.001.05 = black

#### LOW ACTIVITY VIAL SHIELD

#### PART NO. 10.001.01-06

- Lead Glass (thickness 12,5 mm) equivalent to 4 mm Pb
- Outer dimensions: Dia: 60 mm x H: 90 mm
- Inner dimensions: Dia: 30 mm x H: 61 mm
- Standard hole: Ø 5 mm
- Sleve: 5 x 13 mm on demand
- Weight: 1033 g

#### MEDIUM / HIGH ACTIVITY

#### PART NO. 10.002.01 AND 10.002.04

- Lead Glass (thickness 20 mm) equivalent to 6,4 mm Pb
- Outer dimensions: Dia: 75 mm x H: 90 mm
- Inner dimensions: Dia: 31 mm x H: 60 mm
- Standard hole: Ø 5 mm
- Sleve: 5 x 13 mm on demand
- Weight: 1600 g

#### DOSE DRAWING STATION

PART NO. 10.700.01

Accomodates Low Activity Vial Shield.

The operating height can be adjusted to fit the exact workflow.



### **GLASS ACCESSORIES**

#### Accessories for glass vial shields

#### ADAPTORS AND FLAT DISC FOR LOW AND MED/HIGH VIAL SHIELD

PART NO: 109.000.106.000 - 109.000.106.10

109.000.106.000. NO GROVES
 VIAL HEIGHT: 56 mm. AND DIAMETER Ø 22

109.000.106.001. 1 GROVE VIAL HEIGHT: 56 mm. AND DIAMETER Ø 25

109.000.106.002. 2 GROVES VIAL HEIGHT: 54,5 mm. AND DIAMETER Ø 22

109.000.106.003. 3 GROVES VIAL HEIGHT: 53 mm. AND DIAMETER Ø 24

109.000.106.004. 4 GROVES VIAL HEIGHT: 50 mm. AND DIAMETER Ø 22

109.000.106.005. 1 LARGE DEEP GROVES VIAL HEIGHT: 36 mm .AND DIAMETER Ø 24

109.000.106.006. 1 LONG GROVE VIAL HEIGHT: 51 mm. AND DIAMETER Ø 25

109.000.106.010. 5 GROVES VIAL HEIGHT: 49 mm. AND DIAMETER Ø 24. (NEW MALLINCKRODT)



10 items in each package.

#### VIAL SHIELD FOR ELUAT

PART NO: 10.006.01

• Lead glass thickness 26 mm equal to 8 mm Pb

• Outer dimensins: Diameter: 86 mm x Height: 155 mm

109.000.106.007. DICS WITH HEIGHT 3 mm. 109.000.106.008. DICS WITH HEIGHT 4 mm. 109.000.106.009. DICS WITH HEIGHT 6 mm.

Inner dimensions: Diamter: 50,7 mm x Height: 115,4 mm

Weight 3,5 kg

· For mallinckrodt and GE vials



For special requests please contact us any time.

# SYRINGE SHIELDING

New generation of personal protection for syringes

The low energy syringe shield is designed to give the best mix of personal protection and a high functionality, together with fitting the syringe perfectly. Hoy syringe protection comes in different models. The syringe shields are available with three different types of locks: Spring Lock, Twist Lock and from 30 ml. Screw Lock.

#### TUNGSTEN SYRINGE SHIELD

LEAD GLASS HIGH DENSITY (5,2 g / cm $^3$ ) TUNGSTEN SHIELDING 2,5 mm

The tungsten syringe shield is designed for all types of syringes and for the following sizes: 1 ml, 2 ml, 2,5 ml, 3 ml, 5 ml, and 10 ml.

The scale of the syringe is fully visible through the leadglass.



#### LEAD GLASS SYRINGE SHIELD

LEAD GLASS HIGH DENSITY (5,2 g / cm $^3$ ) THICKNESS 5,5 mm.

The lead glass syringe shield is designed for all types of syringes and for the following sizes: 1 ml, 2 ml, 2,5 ml, 3 ml, 5 ml, 10 ml, 30 ml and 50 ml.



#### **LOCK TYPES**

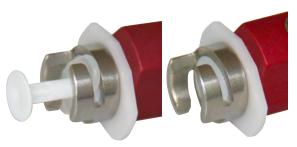
#### **SPRING LOCK**

The spring lock encloses the syringe by pushing a button to release a small stick that attaches the syringe into the sleeve.



#### **TWIST LOCK**

The twist lock encloses the syringe by twisting the syringe into the two flanges that attaches the syringe into the sleeve.



### SYRINGE SHIELDING

New generation of personal protection for syringes

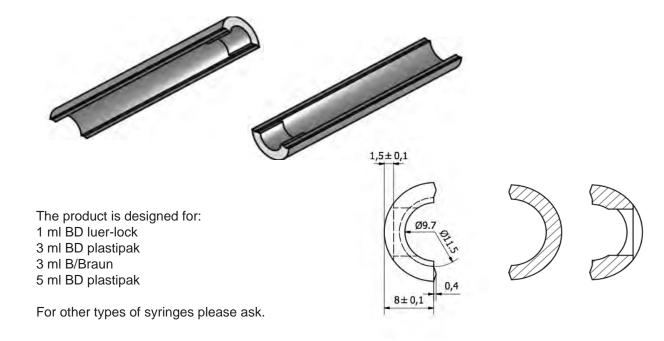
#### SLIDING SYRINGE SHIELDING

This new syringe shielding can be separated in two parts, by pushing the sides apart. It is closed by strong magnets, and it hereby gives the user the possibility to use safety glide needles.

The syringe shield is with a lead glass density of 5,2 g / cm<sup>3</sup> and a tungsten shielding of 0,5 mm.



The two tungsten parts are designed as a radiation trap.



### SYRINGE HANDLING

#### SYRINGE DOSE PIG TRANSPORTER

#### **INCLUDING 6 SYRINGE DOSE PIGS**

#### PART NO. 10.400.01

Length: 295 mmDiameter: 100 mm

Weight: 2,5 kg

Shielding 3 mm. Pb

Also available in blue

Magnetic

Inner diameter: 15 mm



#### LID FOR TRANSPORTER

#### MADE IN ACRYLIC

#### PART NO. 10.400.02

Length: 155 mmDiameter: 110 mmWeight: 385 g



#### SYRINGE DOSE PIG 1 PIECE

#### WITH 6 SYRINGE DOSE PIGS

#### PART NO. 10.400.03

Length: 150 mmDiameter: 30 mm

Inner diameter: 15 mm

• Weight: 350 g

• Shielding 3 mm. Pb

Magnetic

#### LID FOR SYRINGE DOSE PIG

#### MADE IN ALUMINIUM

#### PART NO. 10.400.04

• Length: 92 mm

Diameter: 25 mmInner diameter: 36 mm

• Weight: 50 g



#### SYRINGE PIG CARRIER

#### STAINLESS STEEL

#### PART NO. 10.400.06

Height: 120 mm

External diameter: 54 mm

• Inner diameter: 36 mm

Weight: 600 g

Shielding 3 mm. Pb

Dishwater proof



#### SHIELDED SYRINGE TRAY

#### **FOR 6 SYRINGES**

#### PART NO. 10.500.00

Weight: 5 kg

Lenght: 250 mm

Width: 250 mm

Height: 75 mm

Stackable

• Shielding 3 mm. Pb



### SYRINGE CARRIER



#### LARGE CONTAINER BOX WITH LEAD GLASS

#### WITH 3 MM PB EQUIVALENT LEAD GLASS

#### PART NO. 10.200.03

- Inner dimensions: L: 207 x W: 72 x H: 30 mm
   Outer dimensions: L: 221 x W: 85 x H: 55 mm
- Weight: 2.8 kg
- Can be delivered with a lock
- Also available without the lead glass (10.200.02)



#### HANDLE FOR LARGE CONTAINER

#### (10.200.02 AND 10.200.03)

#### PART NO. 90.200.03

Length: 240 mmHeight: 110 mmWeight: 70 g



#### TWO MAGNETIC SEPARATORS

#### (10.200.02 AND 10.200.03)

#### PART NO. 90.200.04

Width: 75 mmHeight: 15 mmWieght: 30 g



# SHIELDING FOR BAGS

We offer a new product, which is for use when working with 100 ml infusionbags.

The shielding can be monted on the IV pole, with the infusionbag inside, to prevent the radiation from spreading.

#### SHIELDING FOR INFUSION BAGS

#### WITH 10 MM PB EQUIVALENT LEAD GLASS

#### PART NO. 101.050.001

- Dimensions: Length: 180 x Width: 120 x Depth: 40 mm
- Weight: 2,2 kg
- 3 mm Pb
- Works with 100 ml infusionbags



# SYRINGE TRANSPORT

#### PART NO. 101.055.000

Dimension: 270 x 245 x 170 mm

Weight: 6 kg

Shielding: 1 mm on all sides

Special design for Xofigo transport

The case can be locked and sealed.

The case can be made fitted and made waterproof.

There is a handle on top of the case to use during transport.

The advanced clips fit perfectly on the syringe, it locks and secures the syringe by using strong magnets. Additional clips can be purchased:

**PART NO. 101.055.100 PART NO. 101.055.2** 1 set of 2 clips. 5 set of 2 clips.





# SYRINGE TRANSPORT

Container for trolley - non magnetic

The syringe transport container has a removable tray inside. The syringe transport container is only available as non-magnetic.

#### PART NO. 105.001.501

Outer dimensions: 127 x 297 x 190 mm
Tray dimensions: 60 x 200 x 40 mm

Weight: 40 kg

Shielding: 30 mm Pb

Non-magnetic





For additional information about the trolley, see it's designated page at page 21.

# PET SHIELDING

High protected PET Shielding provides the user with optimal radiation shielding within all the work phases during the PET/MR or PET/CT procedure.

#### PET SYRINGE PIG

#### PART NO. 11.001.01

Outer dimensions: Diameter: 100 cm x H: 185 mm
 Inner dimensions: Diameter: 30 mm x H: 152 mm

Available in non-magneticShielding: 35 mm Pb

Weight: 16,2 kg



#### PET VIAL TRANSPORTER

#### PART NO. 11.002.01

Height: 150 mmInner depth: 72 mmInner diameter: 41 mm

Weight: 12 kg

Shielding: 25 mm PbDiameter: 102 mm

 The lidt is secured with magnets to secure firm closure. The handle is ergonomical designed to secure the user.



#### PET SYRINGE SHIELD

#### PART NO. 11.004.01

Weight: 750 g (1 ml)

Non-magnetic / magnetic

Shielding: 10 mm tungsten

Available for the following syringe sizes:
 1 ml, 3 ml, 5 ml, and 10 ml.



### PET SHIELDING

High protected PET Shielding provides the user with optimal radiation shielding within all the work phases during the PET/MR or PET/CT procedure.

#### PET WASTE CONTAINER

#### PART NO. 11.003.01

Height: 230 mmDiameter: 180 mmShielding: 15 mm Pb

Weight: 21 kg

Inner diameter: 110 mmOther dimension on request



#### PET FLOOR STANDING WASTE CONTAINTER

#### PART NO. 101.080.006

• Height: 600 mm

Outer diameter: 305 mm
Inner diameter: 250 mm
Weight: 80-120 kg
Shielding: 3-15 mm Pb

Brushed stainless steel

Designed to have a big bag inside the container. When opening the container the lid is rotated 90 degrees. It can be bolted to the floor.





# α/β/γ SHIELDING

Protecting ALFA / BETA / GAMMA Shielding provides the user with optimal radiation shielding within all work phases with the use of acrylic and lead glass.

#### VIAL SHIELDS FOR BETA

#### PART NO. 10.003.01

- Lead Glass (thickness 22,3 mm)
- Outer Dimensions: Diameter: 94 mm x Height: 120 mm
- Inner Dimensions: Diameter: 37 mm x Height: 72 mm
- Weight: 2,9 kg



#### VIAL SHIELD FOR 100 ML

#### PART NO. 10.005.01

- Lead glass thickness 15 mm
- Lenght: 115 mm (internal)
- Diameter: 82 mm (internal)
- Weight: 3 kgFor 100 ml vial



#### ACRYLIC SHIELDING FOR GAMMA

#### PART NO. 90.004.01 & 90.004.04

- 90.004.01 for ZEVALIN Y-90, Small
   Inner Dimensions: Diameter: 15,4 mm x Height: 36,1 mm
- 90.004.04 for ZEVALIN Y-90, Large
   Inner Dimensions: Diameter: 26,3 mm x Height: 56,7 mm





### ACRYLIC SYRINGE SHIELD W/ SPRING LOCK

#### PART NO. 40.001.01

Accomodates:

1, 2, 5 or 10 ml syringes.

Other dimensions on request.

Thickness: 10 mm





# ACCESSORIES

#### TRAY WITH BALL WHEELS

#### PART NO. 11.802.01

• Length: 150 mm x Width: 150 mm



#### PART NO. 11.803.01

Length: 230 mm x Width: 120 mm



#### STAINLESS STEEL TRAY

#### PART NO. 11.800.01

Height: 16 mmLenght: 300 mmWidth: 250 mm



#### COPPER SYRINGE DIPPER

PART NO. 11.805.01

For use with I-123 and I-111



#### DIPPER FOR ALL TYPES OF DOSE CALIBRATORS

PART NO. 11.804.01

For use with Venstra and Capintec dose calibrators.



### WASTE CONTAINERS

#### WASTE BIN FOR SYRINGES & NEEDLES

#### SMALL

#### PART NO. 10.800.01

Outer diameter: 130 mmInner diameter: max 106 mm

Height: IndividualWeight: 4 kg - 6 kg

Shielding: 3 mm Pb. For FDG 15 mm Pb.



#### WASTE CONTAINER

#### FLOOR STANDING

#### PART NO. 101.080.006

Outer diameter: 305 mm

• Inner diameter: 250 mm

Height: 600 mm

Weight: 80 kg - 120 kg

Brushed stainless steel

Shielding: 3 - 15 mm Pb. For FDG 15 mm Pb.



#### WASTE BIN FOR SYRINGES & NEEDLE

#### **MEDIUM**

#### PART NO. 10.800.02

Outer diameter: 180 mm

Inner diameter: max 147 mm

Height: Individual

Weight: 6 kg - 8 kg

Shielding: 3 mm Pb. For FDG 15 mm Pb.



#### WASTE BIN FOR SYRINGES & NEEDLES

#### **SQUARE**

#### PART NO. INDIVIDUAL

Lenght: Individual

Height: Individual

Weight: Individual

Shielding: 3 mm Pb. For FDG 15 mm Pb.



#### WASTE BIN FOR SYRINGES & NEEDLES

#### **LARGE**

#### PART NO. 10.800.04

Outer diameter: 260 mmInner diameter: max 235 mm

Height: IndividualWeight: 8 kg - 10 kg

Shielding: 3 mm Pb. For FDG 15 mm Pb.



#### WASTE CONTAINER

#### FLOOR STANDING WITH PEDAL

PART NO. 10.800.05

Outer diameter: 260 mm

• Inner diameter: 230 mm

· Height: 410 mm

Weight: 21 kg

• Lead shielding: 3 mm

Shielding: 3 mm Pb.



All waste containers are made after individual measurements, so they fit the yellow bins exactly.

For exact dimensions and prices, please contact us and let us know the brand, length and diameter of your bin.

### RADIO CHEMISTRY

#### VIAL SHIELD FOR 30 MM. VIAL

#### **PART NO. 103.100**

Outer diameter: 78 mmInner diameter: 31 mm

· Constructed in anodised aluminium

• Lid with magnetic lift-off top

Height: 120 mmShielding: 16 mm PbWeight: 2850 g





#### VIAL SHIELD FOR 1 ML. QC SAMPLE GLASS

#### PART NO. 103.101

Outer diameter: 78 mmInner diameter: 12 mm

Constructed in aluminium/anodised aluminium

Weight: 4600 g

Lid with magnetic lift-off top

Height: 107 mmShielding: 25 mm Pb





#### VIAL SHIELD FOR EPPENDORF TUBE

#### **PART NO. 103.200**

Height: 125 mm
Diameter: 70 mm
Weight: 4600 g
Shielding: 30 mm Pb
Brushed stainless steel

Lid with magnetic lift-off top





### TONGS FOR VIALS

We offer several different types of tongs for use when working with vials. The tongs are produced in different lenghts, angles and with different claw types. The 2 gripping claws give an excellent grip of the vial. The tong is designed so that you simply push the white disc against the handle to open the claws. The spring locking automatically holds the vial until the white disc is pushed back again.

The angled tong is produced in 6 different models:

PART NO. 10.604.01 - tong for vial, angled model (right hand) with short claws PART NO. 10.604.02 - tong for vial, angled model (right hand) with long claws PART NO. 10.605.01 - tong for vial, angled model (left hand) with short claws PART NO. 10.605.02 - tong for vial, angled model (left hand), with long claws PART NO. 10.603.01 - tong for vial, standard angled model with short claws



The straight tong is produced in 4 different models:

PART NO. 10.601.01 - tong for vial, short model (16 cm from handle to the claw) with short claws PART NO. 10.601.02 - tong for vial, short model (16 cm from handle to the claw) with long claws PART NO. 10.602.01 - tong for vial, long model (26,5 cm from handle to the claw) with short claws PART NO. 10.602.02 - tong for vial, long model (26,5 cm from handle to the claw) with long claws



### TONGS FOR VIALS

We also offer tongs for other types of vials: Tongs for 1,5 ml vials and for 100 ml vials.

The 2 different tongs are:

**PART NO. 10.606.01** - Tong for 100 ml vials **PART NO. 10.607.01** - Tong for 1,5 ml vials



The new tong from Hoy features a single axis gimbal to stabilize the vial. This ensures a stabilized vial throughout motion; the gimbal will make sure the vial is not tilted, even when tilting the tong.

This works coherently with the Hoy vial glass; the tong is easier to align with the slot in the vial glass for a simple and easy insertion.

#### PART NO. 10.608.01

Length of handle: 125 mm

Length from handle to claw: 260 mm

Length of claw: 70 mmTotal length: 405 mm

Note that this currently only accomodates 10 ml vials, however other volumes can be supported on request.



# SPECIAL TASKS

We offer personal, committed guidance and development of equipment, worksta-tions and constructions.

When it comes to larger tasks, we cooperate with highly trained technicians with many years of experience.

The company works in close cooperation with a local machine shop, which has great expertise in turn and mill tasks and knows how to work with lead and tungsten.

Please contact us for a qualified discussion.





### TROLLEY

#### Modular table that can be customized to meet every need.

Trolley is a table developed to fit all the required items for injecting a patient. The trolley makes the rutine comfortable and provides protected transportation for the personel.

#### PART NO. 105.000.000 & 105.000.100

Height: 910 mmWidth: 500 mmDepth: 650 mm

Stainless steel frame with coloured coating gives the table a solid and presentable appearance. Removable wheels that make the transition to the sterile environment easier.



#### TROLLEY MODULES

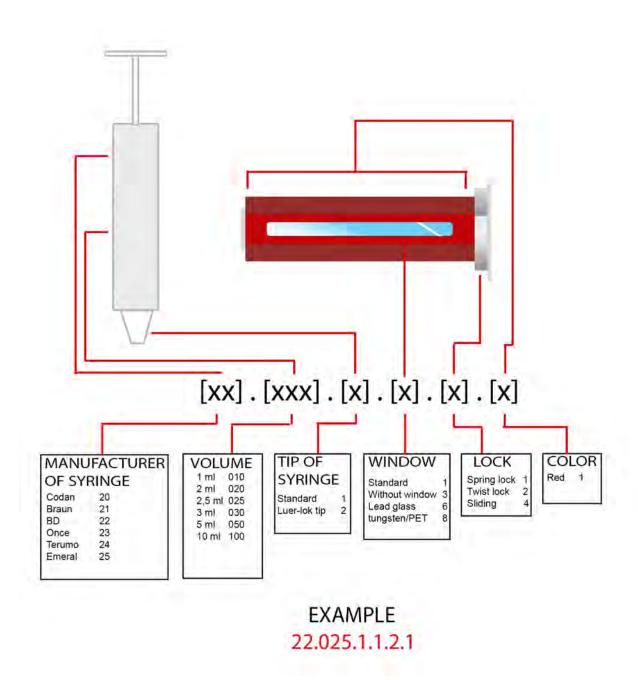
- · Adjustable or fixed tray
- Journal fixer
- · Height adjustable
- Shielded waste bin for sharps
- Tape dispenser

#### **TROLLEY MODULES**

- Laptop table
- Adjustable tray
- Waste bin
- Movable wheels

### SYRINGE SHIELDS

Ordering guide, part numbers & example



The manufacturer of the syringe is BD (22) and the syringe has a volume of 2,5 ml (025). The syringe features a standard tip (1). The chosen syringe shield has a standard window (1). The lock is a twist lock (2). The color of the syringe shield is red (1).

### How to treat our products

#### SOME IMPORTANT GUIDELINES FOR PROPER AND SAFE CLEANING:

Lead glass is a soft glass material which can be scratched and break from hazard. The softness of the lead glass is due to the lead glass density. Lead glass can be compared with home crystal glassware. It is possible to make deep scratches with a knife.

#### HOW TO CLEAN THE COLOURED ANODIZED LEAD GLASS PRODUCT:

Never wash any products in a dishwashing machine. Cleaning in a dishwasher will corrode the coloured surface and it will get corroded. The lead glass will get matt and it will be difficult to look through the glass.

#### FOR PROPER CLEANING:

Use alcohol or normal dish soap. In general never use alkaline substance because it will damage the surface and lead glass. It is also very important to avoid temperature shocks.

