



EIGHTFOLD

RADIATION PROTECTION APPARELS



1ST MALAYSIA RADIATION
PROTECTION APPARELS BRAND



Affordable price



Tailor made to
your satisfaction



Light weight



Trusted Malaysia
Brand



Quality checked



LOW LEAD / LIGHT WEIGHT AND SUPER LEAD FREE APRON

We carry protective apron in lead-free and Low Lead/Light weight materials, to suffice customers that willing to pay more for lighter apparels. The material used are Edge Bi-layer products from UK. Super Lead Free takes advantage of the physics associated with using individual layers of specific materials to provide maximum attenuation by eliminating the effects of fluorescence and secondary scatter radiation with the low atomic weight metals used in Lead-free or low-Lead composites. Our Super Lead Free apron is the best choice for medical practioners working at radiology, cathlab and operation theatre.

LEAD LT SHIELDING LEAD EQUIVALENT

Lead LT (Lead Polymer) apron is made of lead oxide and other composites dissolved in natural rubber, produce a homogeneous sheet that is excellent in radiation protection, flexible, long lasting and resistant to hardening. The special composites produce a protective apron that is lighter than those fabricated with last decade technology. Lead LT apron absorb up to 99% of scattered radiation that reaches protected object, and the stated lead equivalency are verified by facility with require test method comply with Standard IEC-EN 61331-01. The inner core material is certified to be in compliance, within an allowed +/-5% manufacturing tolerance (as mm Pb).

No other Lead-free or low-Lead material passes IEC 61331-1:2014, DIN 6857-1 and ASTM F2547-06 at a lower weight

LEAD LT, LOW LEAD/LIGHT WEIGHT OR LEAD FREE APRON?

Below is a comparison of Malray's Lead LT (Lead Polymer) and Low Lead/Light Weight and super lead free apron in various aspects, to help the user in determination of type of apron to be used.

Media	Benefits	Protection	Attenuation	Weight
Lead LT (Regular Lead)	Most Economical and Recyclable	100% Lead in a vinyl resin	0.5mm Pb Equiv. Protection averages > 96% Attenuation	Around 10 times heavier than normal apron of the same size
Lightweight Lead / Low Lead	Lighter than Regular Lead and Recyclable	Composed of 75-85% metallic lead, encapsulated in a vinyl resin and plasticiser matrix	0.5mm Pb Equiv. Protection averages > 96% Attenuation	Around 20% lighter than lead LT
Lead Free / Super Lead Free	Lightest Weight, no lead and Environmentally Friendly	Composed of 75-85% heavy metal composites, NOT including lead, encapsulated in a vinyl resin and plasticiser matrix.	0.5mm Pb Equiv. Protection averages > 96% Attenuation	Around 20% lighter than Low Lead

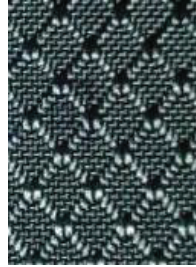
Edge Bi-Layer is tested and certified for attenuation and lead equivalence by the National Physical Laboratory (NPL) against a full range of radiation qualities 50 kVp to 150 kVp using the broad beam geometry method.

FULL APRON COLOUR CODE

420D RIPSTOP DIAMOND NYLON FABRIC



FLRS-06 SAPPHIRE



FLRS-14A ONYX



FLRS-14 RUBY



FLRS-31 EMERALD



FLRS-39 PERIDOT



FLRS-NAVY BLUE

420D OXFORD POLYESTER + PU COATING



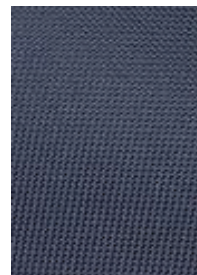
ZLOF-01 BLUE



ZLOF-02 WINE RED



ZLOF-03 OLIVE



ZLOF-04 NAVY BLUE



ZLOF-05 ORANGE



LXOF-06 BEAR

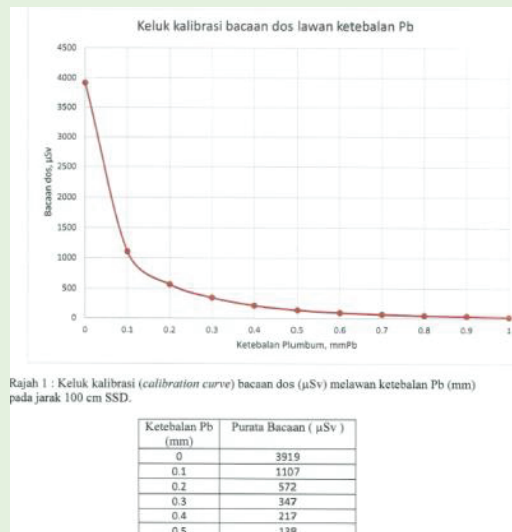
* Please contact our office to check the fabric availability

LOCAL TEST

 **AGENCI NUKLEAR MALAYSIA (NUKLEAR MALAYSIA)**
KEMENTERIAN SAINS, TEKNOLOGI DAN INOVASI
BANGI, 43000 KAJANG
SELANGOR DARUL EHSAN, MALAYSIA
Tel: 6-03-89112000 Faks: 6-03-89112173 <http://www.nuclearmalaysia.gov.my>

LAPORAN UJIAN KETEBALAN KESETARAAN PLUMBUM
No. Laporan: D(E6) 2008046

A) KETERANGAN PEMILIK SAMPEL
(Nyatakan nama dan alamat klinik/hospital yang dilawati serta nombor rujukan pengguna/ permohonan perkhidmatan)
Nama Pemilik: Eightfold Sdn Bhd,
Alamat: 69-1, Jalan SS19/6,
47500 Subang jaya,
SELANGOR.



Sample materials tested by Agensi Nuklear Malaysia

In addition to various international test certificates, materials use to fabricate MALRay low lead and lead free apron has obtained relevant test certificates from Agensi Nuclear Malaysia.

Custom Made Benefit : Custom made ensure best fit and comfort when wearing. On the other hand, it reduces overall weight of the apron by around 5 – 10%. Please fill out the following form and submit for a pricing quote on all custom apparel. All custom sized apparel will include an additional fee for each item ordered. Custom sized apparel is non-refundable, non-returnable.Z

CUSTOM SIZE APPAREL	
Please use the provided CAT numbers and pricing for each custom apparel item	
ACP1	For custom made aprons, vests and skirts
ACP2	For custom made accessories items (ex: Thyroid, Gonadal, Semi Guard)
ACP3	For embroidery up to double line and a maximum of 20 letters

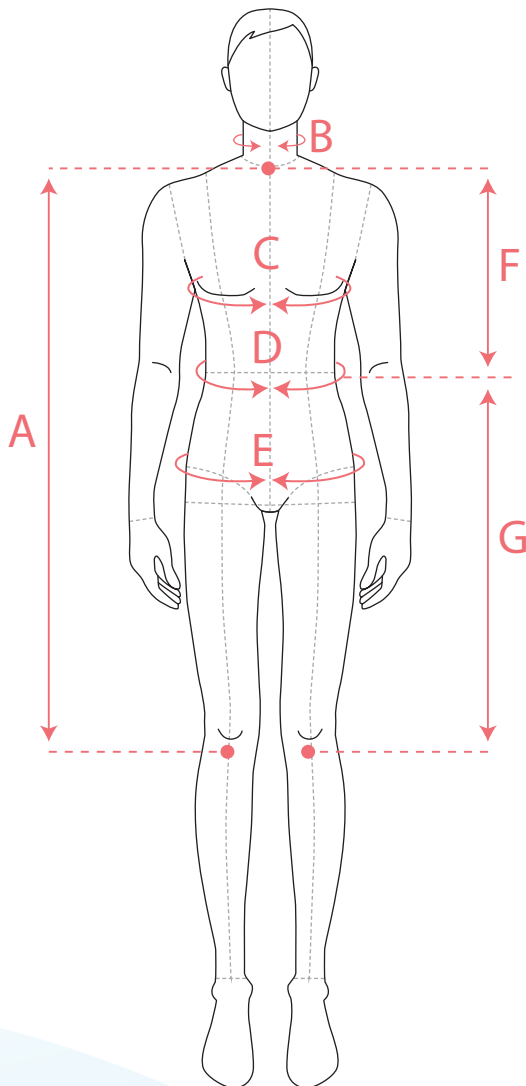
Name : _____ Facility : _____ Date : _____

Apron CAT#: _____ Description : _____

Lead Type : Low Lead / Lead Free Lead Equivalent : _____mmPb Fabric color : _____

EMBROIDERY LINE 1, UP TO 10 LETTERS: _____

EMBROIDERY LINE 2, UP TO 10 LETTERS: _____



GETTING ACCURATE MEASUREMENTS (all in cm)

GENDER : M / F HEIGHT : _____ cm

A	Length (L) - Measure from sternal notch to knee cap	_____ cm
B	Neck (NK) - Measure circumference around the neck	_____ cm
C	Chest (C) - Measure circumference around the widest part of your chest	_____ cm
D	Waist (W) - Measure circumference 1" above navel	_____ cm
E	Hips (H) - Measure circumference around the widest part of hips	_____ cm
F	Vest Length - Measure from sternal notch to navel	_____ cm
G	Skirt Length - Measure from navel to knee cap	_____ cm

* Please submit this information with the order

FULL PROTECTION APRON FOR STAFF & PATIENT USE

WRAP ROUND GUARD (FULL OVERLAP)

Full wrap full overlap gown for full body protection. Distributes weight between shoulders and hips. 0.5mmPb equivalency protection front and 0.25mmPb back come with buckle closure waist belt. Generous armholes for EZ-fit.

Suitable for use in medical imaging / diagnostic department that poses risk of frequent exposure to X-ray environment.

CAT# : EWWA / EGWA
Material : Low Lead / Super Lead Free
Lead Equiv. : Back 0.25 / Front 0.5
Size : S , M , L , XL , 2XL



VEST AND SKIRT GUARD

Full wrap full overlap two pieces (vest & skirt) design for full body protection. Distributes weight between shoulders and hips. 0.5mmPb equivalency protection front, 0.25mm back.

Suitable for use in medical imaging / diagnostic department that poses risk of frequent exposure to X-ray environment.

CAT# : EWWA / EGWA
Material : Low Lead / Super Lead Free
Lead Equiv. : Back 0.25 / Front 0.5
Size : S , M , L , XL , 2XL



MAX GUARD

Full wrap partial overlap in front, maximum protection full-body protection coat-style garment. Distributes weight between shoulders and hips. 0.35/0.5mmPb equivalency protection. Generous armholes for EZ-fit.

Suitable for use in medical imaging / diagnostic department that poses risk of frequent exposure to X-ray environment.

CAT# : EWMG / EGMG
Material : Low Lead / Super Lead Free
Lead Equiv. : 0.35 / 0.5
Size : S , M , L , XL , 2XL



FRONT APRON - EZ GUARD

All Purpose Front Protection Apron. EZ-On / EZ-Off. Available with an easy elastic criss-cross back and Hook and Loop closure on the front. Optional Buckle strap closure. Perfect for every day imaging protection.

Suitable for use in medical imaging / diagnostic department that poses risk of frequent exposure to X-ray environment.

CAT# : ELEZ / EWEZ / EGEZ
Material : Lead LT / Low Lead / Super Lead Free
Lead Equiv. : 0.35 / 0.5
Size : S , M , L , XL , 2XL



THYROID GUARD

Thyroid/ collar guard should be used in all examinations where the thyroid may be exposed to the main beam or to a considerable amount of scatter radiation. MALRAY thyroid guards are design to provide essential shield area to cover thyroid gland position and at the same time remain soft to reduce patient discomfort.



CAT# : ELTM / EWTM / EGTM - Monolithic type
 Material : Lead LT / Low Lead /Lead Free
 Lead Equiv : 0.35 / 0.5
 Neck size : Adult - 15" to 23"
 Child - 11" to 16"



CAT# : ELTG / EWTG / EGTG - Visor type
 Material : Lead LT / Low Lead / Lead Free
 Lead Equiv : 0.35 / 0.5
 Neck size : 15" to 22"



CAT# : EWTR / EGTR - All round (US) type
 Material : Low Lead / Lead Free
 Lead Equiv : 0.35 / 0.5
 Neck size : 15" to 21"

DENTAL GUARD

Dental apron provides protection in the case of the vertex occlusal examination, especially in a patient who is, or may be, pregnant. On the other hand, the use of a lead apron may reassure patients that every effort is being made to ensure their safety.



Panaromic Dental Drapes - with collar

CAT# : EWDA-5F
 Material : Low Lead / Lead Free
 Lead Equiv : 0.5
 Size : Adult - 700mm(L) x 570mm(W)
 Child - 580mm(L) x 450mm(W)



Panaromic Dental Drapes

CAT# : ELDP-5A / 5C
 Material : Lead LT / Low Lead
 Lead Equiv : 0.5



Panaromic Dental Drapes - Short

CAT# : ELDS-5F
 Material : Lead LT
 Lead Equiv : 0.5

HAT GUARD

Protection for head. Hook and Loop fitted closure.



CAT# : ELCS / EWCS / EGCS
 Lead Equiv. : 0.5
 Material : Lead LT / Low Lead / Lead Free
 Head Circumference up to 18"

HAND GUARD

Five fingered protection for full dexterity. 0.5mmPb. Equivalency. Durable, soft vinyl covering. Sell as a pair.



CAT# : ELHG
 Lead Equiv. : 0.5
 Size : M - 350mm(L) x 120mm(W)
 L - 350mm(L) x 130mm(W)

FOR PATIENT USE ONLY

HALF APRON - LAP GUARD



Easy-to-use hook and loop / Buckle Closure Excellent protection for patient and staff.

CAT# : ELLG / EWLG / EGLG
 Material : Lead LT / Low Lead / Super Lead Free
 Lead Equiv. : 0.35 / 0.5
 Size : P , S , M , L , XL , FAB-2

BREAST GUARD



The breast shield is primarily used in head and neck imaging. The shield features adjustable belt for proper positioning. The neck area is empty, allowing visibility of the upper spine and bones during x-ray, while offering protection to the breast area.

CAT# : ELBG / EWBG
 Material : Lead LT / Low Lead
 Lead Equiv : 0.5

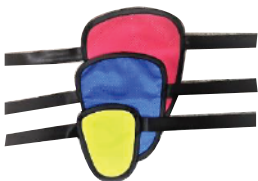
DENTAL THYROID GUARD



Dental thyroid/ collar guard should be used in dental examinations where the thyroid may be exposed to the main beam or to a considerable amount of scatter radiation.

CAT# : ELTD / EWTD – Dental collar
 Material : Lead LT / Low Lead
 Lead Equiv : 0.5
 Neck size : 12" - 20"

GONADAL GUARD / OVARIAN GUARD



Protects the ovaries of female or gonad of male patients during X-rays in medical diagnostics. The set includes 3 individual protective patches come with belts of difference sizes. Comply with IEC 61331-1. Attached belt with 1" buckle. 0.5mmPb equivalency protection. Available in three sizes.

CAT# : EWOG - Strap type (Set of 3)
 Lead Equiv. : 0.5 / 1.0
 Material : Low Lead
 Size : S - 140mm(L) x 115mm(W)
 M - 200mm(L) x 165mm(W)
 L - 220mm(L) x 180mm(W)



Protects the ovaries of female or gonad of male patients during X-rays in medical diagnostics. The unite design velcro belt with snap buckle fastener guarantees easy putting on and taking off and a comfortable size adjustment. Comply with IEC 61331-1. Attached belt with 1" buckle. 0.5mmPb equivalency protection. Available in three sizes.

CAT# : ELOB / EWOB - Belt type (Set of 3)
 Lead Equiv. : 0.5 / 1.0
 Material : Low Lead
 Size : S - 140mm(L) x 115mm(W)
 M - 200mm(L) x 165mm(W)
 L - 220mm(L) x 180mm(W)

WHY YOU SHOULD PROTECT YOUR EYES FROM RADIATION EXPOSURE

Requiring hospital staff, doctors and x-ray technicians to wear lead glasses is an important step to helping prevent x-ray radiation damage to the eyes. Lead glasses can greatly reduce the risk of x-ray radiation exposure to only 2-3%. There are several risks with leaving the eyes unprotected from x-ray radiation exposure. At the time of unprotected x-ray radiation exposure, most people do not experience any pain. However, it is very common to experience a dull pain in exposed tissues, including the eyes, within 1 to 3 hours of the x-ray radiation exposure. Exposure to x-ray radiation can also cause swelling and first degree burns.

SECURE-GUARD



Vented goggle for extreme protection. Adjustable headband keeps goggles securely on head and prevents slippage. Neoprene foam cushioning for facial comfort. Large lens pocket allows for maximum viewing area. Vented to prevent fogging.

CAT# : ELES Lead Equiv. : 0.75mm front and sides.
Frame : impact resistant plastic Weight : 120g

COVER-GUARD



Comfortable protection over regular glasses. Excellent front and side visibility. Provides limited splash protection. Can be worn over prescription eyewear. Regular hinges with molded nose piece. Includes 0.75mmPb glass side shields. Includes premium case.

CAT# : ELEC Lead Equiv. : 0.75mm front and sides.
Frame : Black rubberized nylon Weight : 108g

FITOVER GUARD



Designed to be worn over prescription eye glasses. Optional detachable inner frame to fit permanent prescription lenses. Lead glasses for radiation protection. Fits large sized faces. Above industry standard protection with 0.75mmPb lead glass lenses. Includes comfortable cotton retention strap and protective storage case. (Prescription lens by others)

CAT# : ELEF Lead Equiv. : 0.75mm LE
Frame : Rubberized nylon Weight : 112g

SPORT GUARD



Lead glasses lenses for radiation protection. The lens is resistant to minor wear and scratches. Ergonomics design which offers maximum comfort. Suitable for heavy duties and high utilisation environment.

Above industry standard protection with 0.75mmPb lead glass lenses. Includes comfortable retention sport style strap and protective storage case.

CAT# : ETEP Lead Equiv. : 0.75mm LE
Frame : Rubberized nylon Weight : 116g

COMFORT GUARD



Light weight design, lead glasses for radiation protection. The lens is resistant to minor wear and scratches. Ergonomics design offers maximum comfort.

Lead glass lenses with 0.75mmPb protection can be custom made with prescriptions. Includes comfortable retention strap and protective storage case.

CAT# : ETEM Lead Equiv. : 0.75mm LE
Frame : Rubberized nylon Weight : 70g

CT EYES SHIELD



Designed to protect the eye, which becomes especially sensitive to radiation after repeated CT procedures. 70% protection to the complete eye. Perfect fit to prevent accidental exposure to radiation. Designed to mould to the eye's shape. Set of 2, Child and Adult.

CAT# : EWEN Lead Equiv. : 0.75mm LE

MOBILE LEAD SCREEN WITH WINDOW



Mobile Lead Screen with lead Screen features a 2.00mmPb equivalence and comes in two standard sizes. Custom made model is available.

- with 4 lockable castle wheels
- lead glass window
- Lead Equivalent = 2.0mmPb

CAT#: : MLS2
 Dimension : Standard Panel - MLSW-198502 : 850mm(W) x 1880mm(H)
 : Wide Panel - MLSW-191202 : 1200mm(W) x 1880mm(H)
 Glass size : 150mm x 200mm , 200mm x 300mm , 300mm x 400mm

MOBILE WHEELED APRON HANGER



Solid and durable mobile 5/10 swing arm apron rack organizes and protects up to 10 X-ray aprons in a traditional garment-style rack. Ideal radiation protection storage solution for a busy radiology department. 10 pivoted arms fan out for flexibility to easily store and retrieve aprons. Locking casters glide smoothly for easy mobility.

CAT#: : ESMH (5 / 10 arms (stainless steel) with detachable bracket)
 Materials: : Full stainless steel arms and frame
 : 75mm swivel wheel x 4, 2 lockable diagonally fit.
 Dimension : 540mm(L) x 600mm(D) x 1320mm(H)

*the dimension varies slightly between batches.

CHEST STAND / BUCKY



- Mobile CR DR Image Receptor Plate Holder.
- Stationary mount with 4 rubber pads
- c/w collapsible board for kid

CAT# : ESCB-SS
 Materials : Grade 304 Stainless Steel Frame and members,
 vertical rails and horizontal clamp
 Approx. Dimension : 1830mm(H) x 600mm(W) x 440mm(L)
 Clamp range : Vertical : 200mm – 500mm
 Horizontal : 345mm – 520mm

MOBILE RADIATION SHIELD FOR CHEST X-RAY



- Full stainless steel 304 construction
- Stable frame and smooth movement
- Easy disassemble for long distance travelling

CAT# : MRSA-SS + EMMC-5
 Lead Shield Dim : 760mm(H) x 610mm(W)
 Base dimension : 550mm x 450mm
 Overall Height : 1540mm
 Adjustable range : 780mm - 1500mm
 Stainless Steel Base with 4 swivel wheels, 2 lockable

WALL MOUNTED APRON HANGER – PEG RACK (ECONOMIC)



- 1 / 3 / 5 aprons rack (stainless steel)
- Stainless steel apron hanger organizes and protects up to 5 X-ray aprons in a wall mounted rack with 140mm pegs.

CAT# : ESWH-5C-SS

WALL MOUNTED APRON HANGER



- 5 arms (stainless steel) with detachable bracket.
- Stainless steel apron hanger organizes and protects up to 5 X-ray aprons in a wall mounted rack.

CAT# : ESWH-5D-SS

SINGLE APRON HANGER



Materials: : Stainless Steel 304
Dimension : 165mm(H) x 500mm(L)

CAT# : ESSH-1A-SS