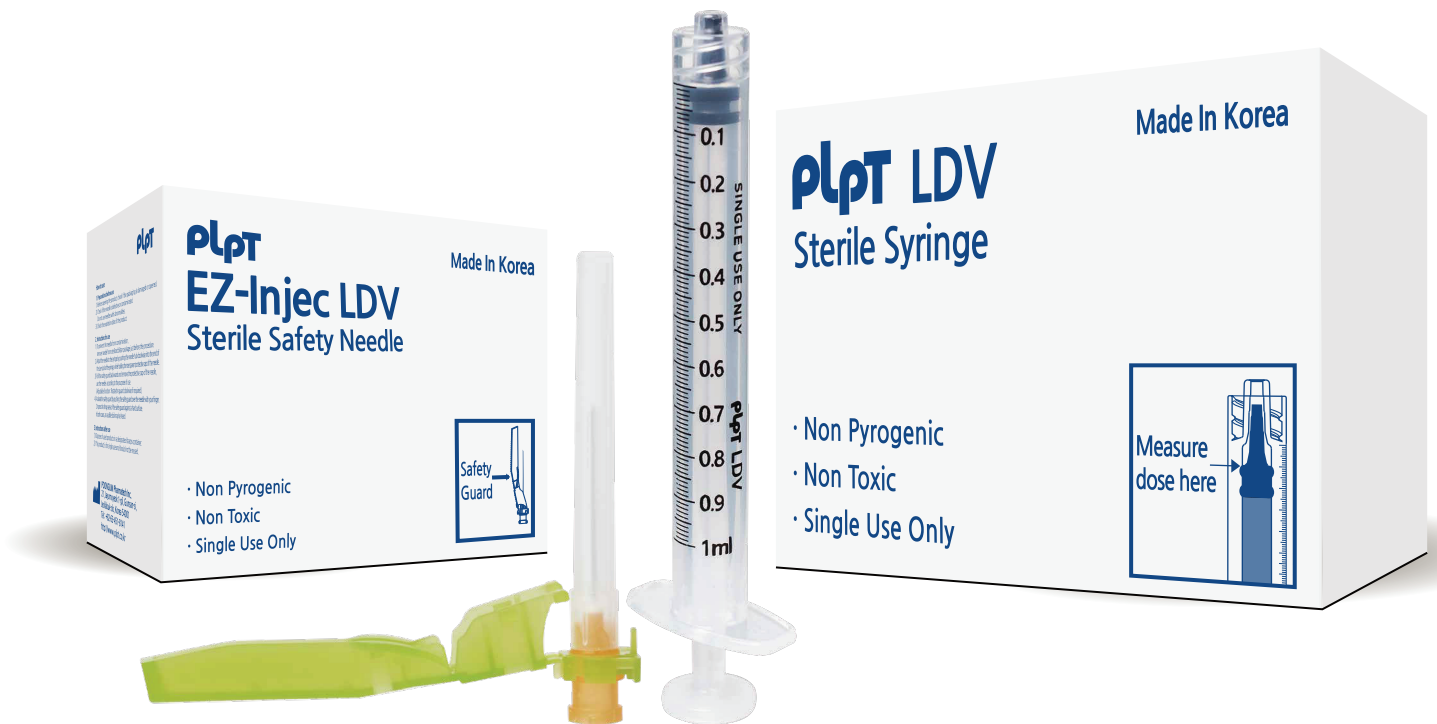




# PLPT LDV(LDS)

## Sterile Syringe

LDV LL Syringe has a Luer-Lock with a screw inside the top, and LDV LC Syringe has a cone-shaped top. With an extended (three-stage conical) plunger that inserts into the neck of the barrel to expel more fluid from the syringe by pushing the plunger rod. By using medical device grade material (polypropylene), the LDV syringe shows clear transparency, and due to its high heat resistance, it can be sterilized after filling in the solution. LC/LL products have the same inner diameter, and the Luer-Lock type has a thicker outer diameter than the Luer-Cone type.

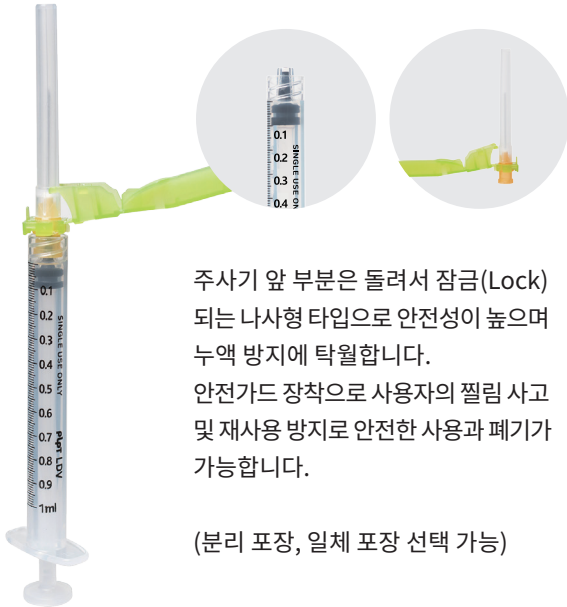


- ✓ **No Dead Volume** \*Pfizer's office residual volume test
- ✓ Individually Blister Packing
- ✓ Medical Device Grade(Polypropylene)
- ✓ Clear Transparency, High heat resistance
- ✓ Sterilization is possible after filling in the Solution
- ✓ **FDA 510(K) Cleared** · CE<sub>2764</sub> · ISO 13485
- ✓ Safety Guard Technology
- ✓ Prevent Secondary Infection
- ✓ Disposable
- ✓ Integral feature reduces the risk of the leakage and pop-off

Item	Article No.	1 Inner Box	1 Out Box	1 Pallet
1ml LDV Luer-Lock Syringe	AS010001	100 / 0.64kg	1,200 / 8.78kg	28,800 / 222.19kg
SG25-25	AS020009	100 / 0.28kg	1,800 / 6.25kg	43,200 / 161.67kg

# PLPT LDV Option / Available to customize

## 1 Luer-Lock Syringe + Safety Guard



주사기 앞 부분은 돌려서 잠금(Lock) 되는 나사형 타입으로 안전성이 높으며 누액 방지에 탁월합니다.  
안전가드 장착으로 사용자의 찔림 사고 및 재사용 방지로 안전한 사용과 폐기가 가능합니다.

(분리 포장, 일체 포장 선택 가능)

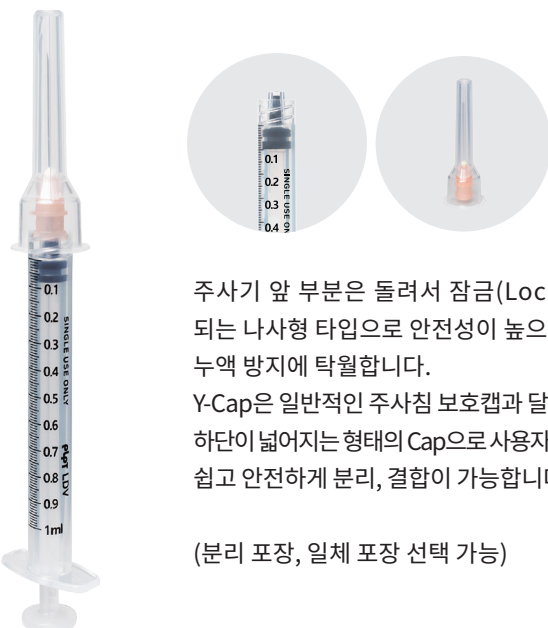
## 2 Luer-Cone Syringe + Safety Guard



정밀 금형 사출로 주사기와 주사침이 단단하게 결합되며 쉽게 장착하여 즉시 사용이 가능합니다.  
안전가드 장착으로 사용자의 찔림 사고 및 재사용 방지로 안전한 사용과 폐기가 가능합니다.

(분리 포장, 일체 포장 선택 가능)

## 3 Luer-Lock Syringe + Y-cap



주사기 앞 부분은 돌려서 잠금(Lock) 되는 나사형 타입으로 안전성이 높으며 누액 방지에 탁월합니다.  
Y-Cap은 일반적인 주사침 보호캡과 달리 하단이 넓어지는 형태의 Cap으로 사용자가 쉽고 안전하게 분리, 결합이 가능합니다.

(분리 포장, 일체 포장 선택 가능)

## 4 Luer-Cone Syringe + Y-cap

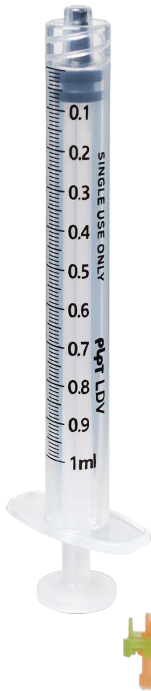


정밀 금형 사출로 주사기와 주사침이 단단하게 결합되며 쉽게 장착하여 즉시 사용이 가능합니다.  
Y-Cap은 일반적인 주사침 보호캡과 달리 하단이 넓어지는 형태의 Cap으로 사용자가 쉽고 안전하게 분리, 결합이 가능합니다.

(분리 포장, 일체 포장 선택 가능)

# PLPT LDV Sterile Syringe

- Manufacturing License number 22-4080 · FDA Cleared · CE 2764 · ISO 13485, ISO 7886-1, ISO 80369-7
- Needle Tip : 3 Bevels – 5 Bevels ·Length : 16mm(5/8") –25mm(1")
- Guage : 21G~34G can be manufactured upon request of customer
- Pfizer's official residual volume test
- Produced in accordance with the Ministry of Food and Drug Safety and ISO Standards
- E.O Gas Sterilization · Expiration date : 3 years
- This product is a "disposable medical device". Please read and use "Precautions for use" and "How to use" carefully
- In-House Production of All Parts



## LDV Luer Lock Syringe Set



※Syringe, Needle Separated Packing

## LDV Luer Lock Syringe Safety Guard



※Syringe, Needle All-in-one Packing

1mL LDV  
Luer Cone(LC) Syringe

## LDV Luer Cone Syringe Safety Guard



※Syringe, Needle All-in-one Packing



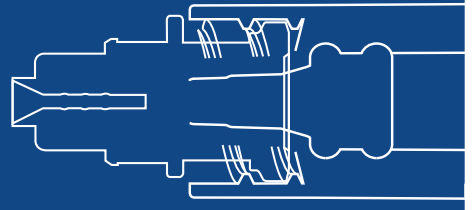
0.5mL LDV  
Luer Cone(LC)

## LDV Syringe set capa

	Div		Capa /Monthly	Unit	Functional Strengths	Remark
1ml syringe	LUER LOCK	Separated (two pieces)	15,000,000	set	Safety guard needle adopted (single use only)	Safety guard needle separately packed
	LUER LOCK	All-in-one	15,000,000	set	Safety guard needle adopted (single use only)	Safety guard needle and syringe is packed on one package.
1ml syringe	LUER CONE	All-in-one	15,000,000	set	Safety guard needle adopted (single use only)	Safety guard needle and syringe is packed on one package.
0.5ml syringe	LUER CONE	All-in-one	15,000,000	set	Safety guard needle adopted (single use only)	Safety guard needle and syringe is packed on one package.



# LDV Syringe



## Product Features

**LDV LL Syringe** has a Luer-Lock with a screw inside the top, and **LDV LC Syringe** has a cone-shaped at the top. with an extended (three-stage conical) plunger that inserts into the neck of the Barrel to expel more fluid from the syringe by pushing the Plunger rod. By using medical device grade material (polypropylene), LDV syringe shows clear transparency and due to its high heat resistance, it can be sterilized after filling in the solution. LC/LL products have the same inner diameter, and the Luer-Lock type has a thicker outer diameter than the Luer-Cone type.

- + Manufacturing License number 19-4547
- + Produced in accordance with the Ministry of Food and Drug Safety and ISO standards.
- + FDA 510(K) Cleared · CE<sub>2764</sub> · GMP · ISO 13485
- + E.O Gas Sterilization
- + Expiration date: 3 years
- + This product is a “disposable medical device”. Please read and use “Precautions for use” and “How to use” carefully.
- + In-House Production of All Parts

## Product Detail This product is a medical device that complies with the Ministry of Food and Drug Safety's medical.

### 1 Luer-Lock

Luer-Lock structure conforms to ISO standards, so it is compatible with all needles. It's an integral feature that reduces the risk of leakage and pop-off.



### 3 Plunger

The plunger structure has a three-stage conical shape that narrows upwards. By meeting the design of the three-stage structure of the Luer-Lock inner diameter, it allows maximizing Low Dead Volume Efficiency when injecting the solution.

### 5 Barrel

The long and an inner diameter of the barrel allows the Injection force to be low for accurate dosages

### 6 Flange (Finger grip)

The Flange (Finger Grip), which is integrated with Barrel, is ergonomically designed to allow stable injection with a comfortable grip when administered

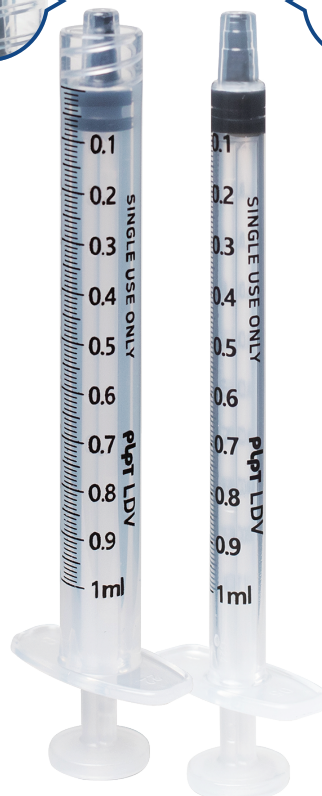
### 2 Luer-Cone

Luer-Cone structure conforms to ISO standards, so it is compatible with all needles. The Needle is firmly fastened to the top with a quicker and superior binding force that directly engages the Syringe.



### 4 Plunger Rod

The part of the plunger rod (Part A) where the force is applied by the thumb is circular, preventing slippage and allowing stable injection when administering drugs.

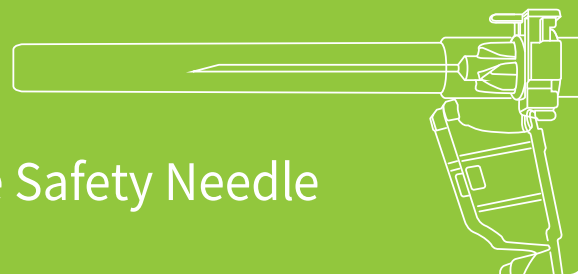


#### LDV(Low Dead Volume)

LDV(S) (Low Dead Volume (Space))  
There is almost no space for Dead Volume (When used with our PLPT EZ-Inject LDV Sterile Needle to reduce costs and maximize efficiency with approximately 4μL remaining)

#### Pfizer's official residual volume test

# EZ-Injec LDV Sterile Safety Needle



## Product Features

A disposable sterilized injection needle combined with a **Safety Guard** is a needle that protects the safety of medical personnel and patients, combined with a safety guard that prevents reuse and enables safe disposal.

When used in conjunction with our LDV Sterile Syringe, excellent coupling, leakage and pop-off is reduced.

- + Manufacturing License number 19-4547
- + Produced in accordance with the Ministry of Food and Drug Safety and ISO standards.
- + FDA 510(K) Cleared · CE<sub>2764</sub> · GMP · ISO 13485
- + E.O Gas Sterilization
- + Expiration date: 3 years
- + This product is a “disposable medical device”. Please read and use “Precautions for use” and “How to use” carefully.
- + In-House Production of All Parts

## Product Detail **This product is a medical device that complies with the Ministry of Food and Drug Safety's medical.**

### ① Safety Guard

Thanks to the V-cut design of the safety guard, **prevent secondary infection and reuse**. After Injecting the medicine into the human body, the safety guard is combined with the needle and makes safe disposal possible. Push the safety guard with one hand or against a hard surface **to prevent reuse and safe disposal**.

### ③ Needle

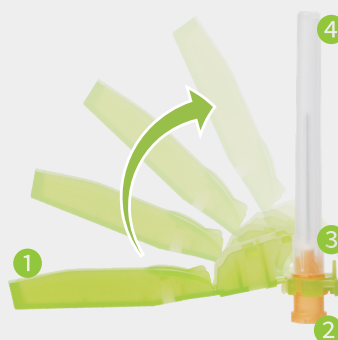
Disposable sterilization needles are used to inject medicine, etc. into the human body or attract body fluids.

- Gauge: 25G, 26G

26G is a 5-Bevel technology **suitable for under-18s** by increasing subcutaneous penetration and minimizing pain.

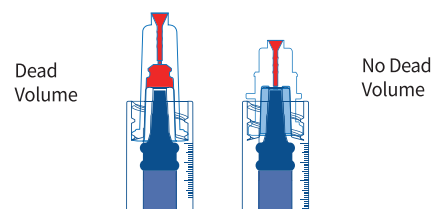
- **Gauges can be manufactured upon request of the customer (18~34G)**

### Characteristics



### ② Hub

By reducing the length of the needle hub, the empty space for solution is reduced. Optimized Dead Volume Function. (When used with PLPT LDV Sterile Syringe, the residual volume of approximate 4μL reduces cost and maximizes efficiency)



General hub LDV hub

**The LDV function of LL/LC is the same.**

### ④ Needle Cap

A Cap(cover) to protect the needle.

# EZ-Injec LDV Sterile Safety Needle

- Manufacturing License number 19-4547 · FDA Cleared · CE2764 · ISO 13485, ISO 7864, ISO 9626, ISO 80369-7
- Needle Tip : 3 Bevels – 6 Bevels
- Length : 16mm(5/8") – 25mm(1")
- Gauge : 21G~34G can be manufactured upon request of customer
- Pfizer's official residual volume test
- Produced in accordance with the Ministry of Food and Drug Safety and ISO Standards
- E.O Gas Sterilization
- Expiration date : 3 years
- This product is a "disposable medical device". Please read and use "Precautions for use" and "How to use" carefully
- In-House Production of All Parts



## Needle Hub

When used with PLPT LDV Sterile Syringe, the residual volume of approximate 4μL reduces cost and maximizes efficiency

## Safety Guard

The effective prevention of needlestick injuries and reuse, makes safe disposal possible



## Unique Mirror Tube Technology

### Inner-outer mirror surface finish

- Large inner Diameter
- Same Outer Diameter

The international of the needle is wider than the ISO 9262:2016 Solution can be fully injected even under low injection force.

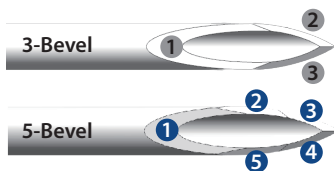
## Specification

Sterile disposable product to inject medicines into the body and withdraw fluids from the body. Compatible with all syringes and exceptional binding force.  
CE certified product advantages in licensing export product. The validity period(Shelf life) is five years from the date of manufacture.

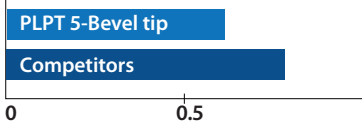
Gauge	EZ-Injec Needle		ISO Standard	
	Inner Diameter (mm)(min)	Outer Diameter (mm)(min)	Inner Diameter (mm)(min)	
34G	0.091	0.178~0.191	RW : 0.064   TW : 0.091   ETW : 0.105	
32G	0.125	0.229~0.241	RW : 0.089   TW : 0.105   ETW : 0.125   UTW : 0.146	
30G	0.210	0.298~0.32	RW : 0.133   TW : 0.165   ETW : 0.190   UTW : 0.240	
27G	0.290	0.40~0.42	RW : 0.184   TW : 0.241	
25G	0.370	0.50~0.53	RW : 0.232   TW : 0.292	
23G	0.460	0.60~0.673	RW : 0.317   TW : 0.370   ETW : 0.61   UTW : 0.645	
21G	0.610	0.80~0.83	RW : 0.490   TW : 0.547   ETW : 0.61   UTW : 0.645	

\*Could be ordered at the request of the customer

## 5-Bevel Technology



### Penetration Force Test Result



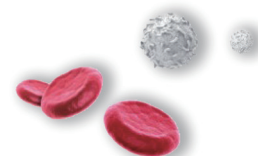
A significant 23% reduction in average penetration force for needles, considered less pain compared to competitive suitable for under-18s

## HIV/AIDS Screening system

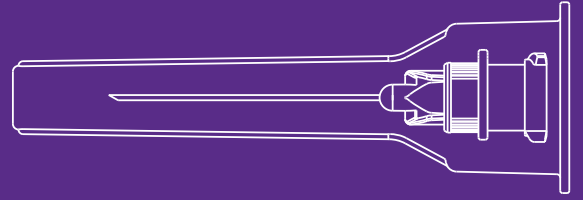
### PLPT sol™ ICA

#### New Solution for Immune Cell Analysis System

- Easy to use
- Reduce time
- Cost effectiveness
- High accuracy



# PLPT Y-Cap



## Product Features

All-in-one LDV syringes (Pre-assembled syringe plus needle in a single pack) can be used immediately when removing blister paper (wrapping paper) without an assembly process.

- + Produced in accordance with the Ministry of Food and Drug Safety and ISO standards.
- + FDA 510(K) Cleared · CE 2764 · CAP · ISO 13485
- + E.O Gas Sterilization
- + Expiration date: 3 years
- + This product is a “disposable medical device”. Please read and use “Precautions for use” and “How to use” carefully.
- + In-House Production of All Parts

## Product Detail This product is a medical device that complies with the Ministry of Food and Drug Safety's medical.

### ① Y-Cap

The Y-type cap is a wide Y-shape cover that minimizes needle-stick injury and allows safe disposal.

### ③ Needle

Poonglim's needle is a special needle, has a wide inner diameter with mirror tube technology, the inner and outer surfaces of the needle are smoothly processed to facilitate the flow of medicine and **minimize pain during subcutaneous penetration.**

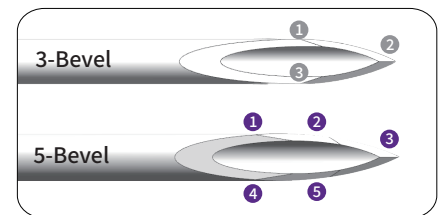
- Gauge: 25G, 26G  
26G is a 5-Bevel technology **suitable for under-18s** by increasing subcutaneous penetration and minimizing pain.
- **Gauges can be manufactured upon request of the customer (18~34G)**

### ④ Specification

Type: Luer-Lock, Needle : 25G x 25mm (1"),  
Luer-Cone 26G x 16mm (5/8")

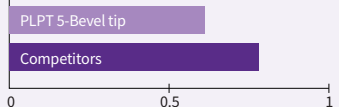


### ② 5-Bevel Technology



The Poonglim's needle uses a special tip design, which features a 5-bevel needle tip that is able to penetrate the skin more easily due to its flatter, thinner surface with the force needed to penetrate the skin reduced, for a smoother and **more comfortable injection experience and less painful,** compared to 3-bevel needles.

#### Penetration Force Test Result



Laboratory testing demonstrated a significant 23% reduction in average penetration force for the 5-bevel vs 3-bevel needles, increased patient preferences, and considered less pain.

## PLPT LDV Option / Can be customized according to order

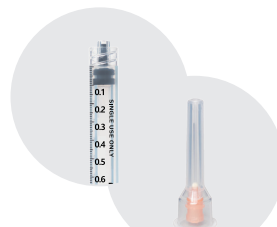
### ① Lure-Lock + Safety guard



### ② Lure-Cone + Safety guard



### ③ Lure-Lock + Y-Cap



### ④ Lure-Cone + Y-Cap



# PLPT Syringe Instruction

## LDV Luer-Lock Syringe Instructions for Safety Gaurd



Attach the needle to the syringe by pushing the needle hub clockwise into the end of the Luer-Lock of the syringe, while holding the transparent protective cap of the needle.



Attach the drug into the syringe to be used according to the doctor's prescription. Adjustable function: Rotate the guard clockwise if required.



Wipe the injection area with an alcohol swab, remove the needle's transparent protective cap, pierce the needle into the injection area, and perform the injection



After injection, wipe the injection area with alcohol swab.

## LDV Luer-Cone Syringe Instructions for Safety Gaurd



Hold the bottom of the Y-Cap and equip it to fit into the syringe.



Attach the drug into the syringe to be used according to the doctor's prescription. Adjustable function: Rotate the guard clockwise if required.

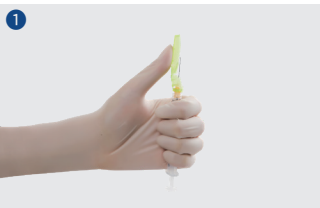


Wipe the injection area with an alcohol swab, remove the needle's transparent protective cap, pierce the needle into the injection area, and perform the injection



After injection, wipe the injection area with alcohol swab.

## PLPT LDV Instructions for Safety Gaurd



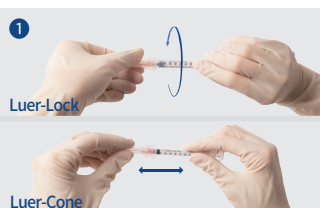
Push the safety guard on the needle with your finger to activate the safety guard.



Or, press the top of the safety guard against a hard surface. In both cases, you may hear a clicking sound.



## Y-Cap Syringe Instructions for Use & Disposal



Attach the needle to the syringe by pushing the needle hub clockwise into the end of the Luer-Lock of the syringe, while holding the Y-cap of the needle. (Luer-Lock)

Hold the bottom of the Y-Cap and equip it to fit into the syringe. (Luer-Cone)



Disinfect the injection area with an alcohol swab before injection, remove the Y-cap, and inject it into the skin.

After injection, wipe the injection area with alcohol swab.



After closing the Y-Cap, turn slightly to separate the syringe and needle.

Syringes and needles are put in a dedicated medical waste container and discharged.









Syringes and needles are put in a dedicated medical waste container and discharged.



# Packing Detail



It was securely packaged by placing a pad on the pallet's bottom, attaching brackets to all four corners, and carefully wrapping it.

Product Information		Unit	1 inner box	1 out box +1 Weight of out box	1 pallet(5단*4box) +1 Weight of pallet
PLPT LDV sterile syringes	Quantity	pcs	100	1,200	24,000
	Weight(Appox.)	KG	0.57	7.53	163.60
	Size	-	21.5*13.5*14(cm)	67.5*28.5*30.5(cm)	1*1*1.67(m)
1m*1m*0.12m + Photo of one stack of box			 		
PLPT EZ-Injec LDV sterile needle	Quantity	pcs	100	1,800	36,000
	Weight(Appox.)	KG	0.44	8.78	188.25
	Size	-	21.5*10*14(cm)	67.5*32.5*30.5(cm)	1*1*1.67(m)
Pallet 1m*1m*0.12m +Photo of one stack of box			 		
PLPT LC syringes	Quantity	pcs	100	1,200	24,000
	Weight(Appox.)	KG	0.50	6.70	140.30
	Size	-	21.5*13.5*14(cm)	67.5*28.5*30.5(cm)	1*1*1.67(m)
Pallet 1m*1m*0.12m +Photo of one stack of box			 		

The molar values provided above are for reference purposes only and may vary from the actual values.