

Sol-Millennium® Low Dead Space Injection Devices for COVID-19 vaccination campaign



More Doses



More Lives



 **SOL-MILLENNIUM®**
Building a Healthier Tomorrow



A FEW WORDS ABOUT US

SOL-MILLENNIUM Medical Group is a relatively new enterprise at just 10 years old, but is quickly building a reputation as a trusted, reliable and customer-focused partner to the healthcare industry.

Whilst we may be young, our reach is wide with presence across the globe. You will find us in Europe, North America, South America and SE Asia.

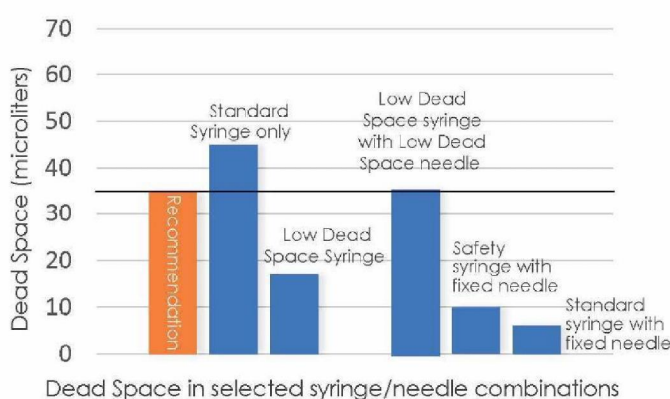


Our approach to product development is simple. We are particularly careful to ensure that the design of our products are intuitive and easy to use, thereby minimising the impact on application technique.

Our team is experienced and knowledgeable and we are here to help you operate efficiently, effectively and economically. Our new R&D facility in Switzerland has been increasing and enhancing our current comprehensive range of products.

At SOL-MILLENNIUM we know what we do best – we make good quality, affordable medical devices that are familiar, safe and easy to use.

Importance of Low Dead Space injection device during COVID-19 pandemic



For the administration of Pfizer's Covid-19 vaccine, use of syringe and needle combinations having an **average dead space of 35 microliters (0.035 ml)** enables to withdraw **6 doses from a vial** instead of the usual 5 doses².

Vaccination became a priority in the context of the pandemic situation.

The syringe used for vaccination should waste as little vaccine as possible while being accurate and reliable.

Injection device with low dead space, also known as 'dose-sparing' device, increases the amount of useable vaccine withdrawn from a multi-dose vial allowing for greater distribution of the vaccine¹, such as it is the case for COVID-19 vaccination with some vaccine².

Use of low dead space syringes does not require any change in current clinical practice and represents financial savings as well.

References:

1. Strauss K, van Zundert A, Frid A, Costigliola V. Pandemic influenza preparedness: the critical role of the syringe. *Vaccine*. 2006 May 29;24(22):4874-82.
2. EMA 2021. Extra dose from vials of Comirnaty COVID-19 vaccine. News 08/01/2021. Available on-line at www.ema.europa.eu. Accessed 22 January 2021.

SOL-Millennium[®] Low Dead Space Injection Devices for COVID-19 vaccination campaign

Low dead space solutions offered by SOL-MILLENNIUM[®]

**SOL-M[™] 1ml Slip Tip
Syringe only
Low Dead Space**



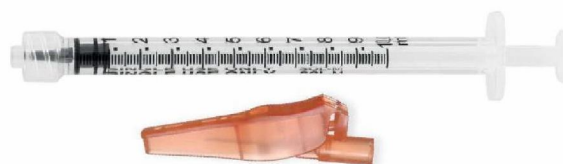
Average dead space
17 microliters

**SOL-M[™] 1 ml Luer Lock
Syringe only
Low Dead Space**



Average dead space
17 microliters

**SOL-CARE 1 ml Luer Lock
Syringe with Safety Needle
combo
Low Dead Space**



Average dead space
< 30 microliters

Ultra low dead space solutions offered by SOL-MILLENNIUM[®]

**SOL-CARE[™] TB Safety
Syringe 25G x 1"**



Average dead space
10 microliters

**SOL-GUARD TB Safety
Syringe 25G x 1"**



Average dead space
6 microliters

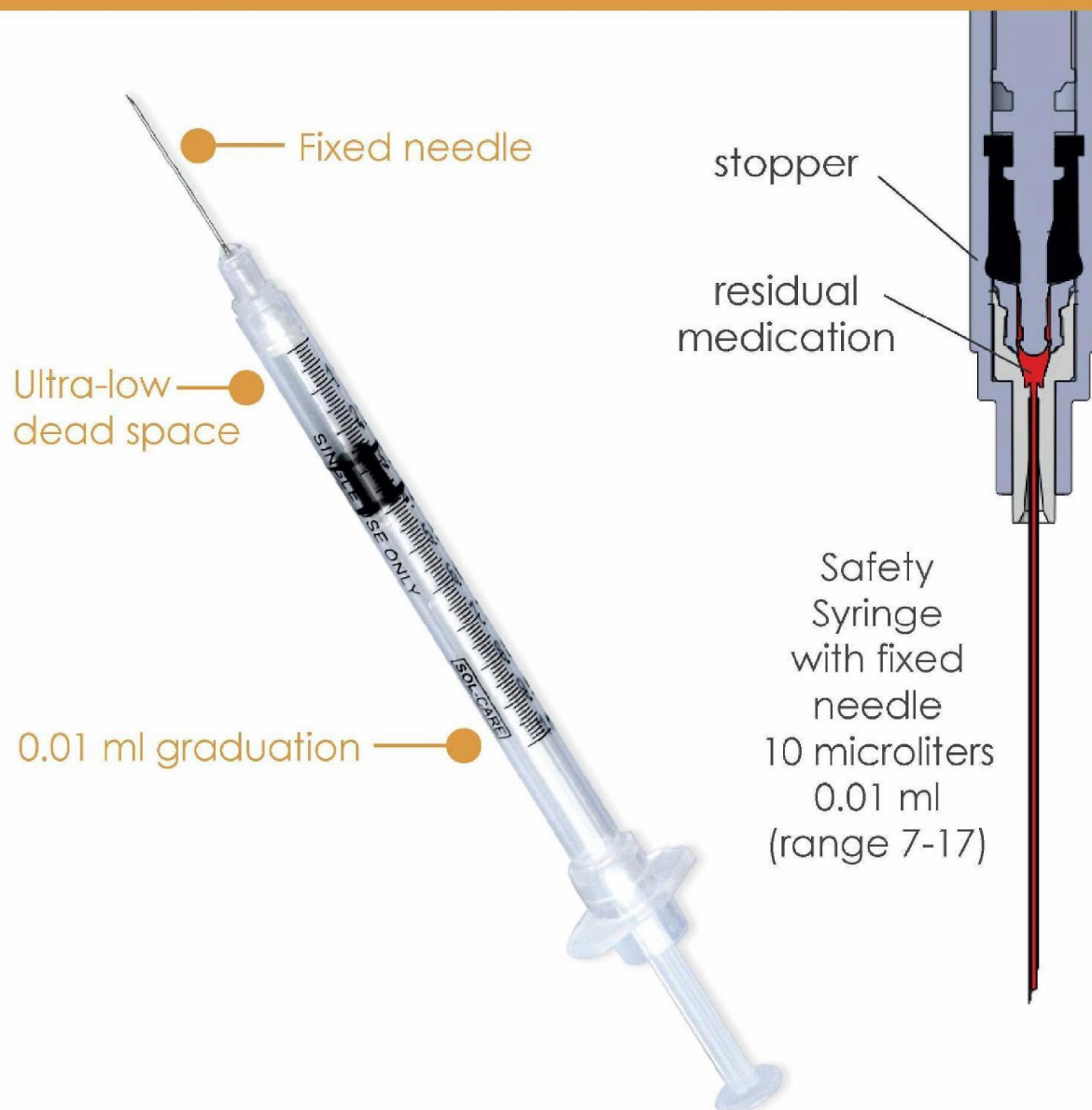
**SOL-M[™] Syringe
with fixed needle 25G x 1"**



Average dead space
6 microliters

SOL-CARE™ Safety Syringe

with fixed needle



Safety feature: the needle can be retracted inside the barrel after use.

CE 2797

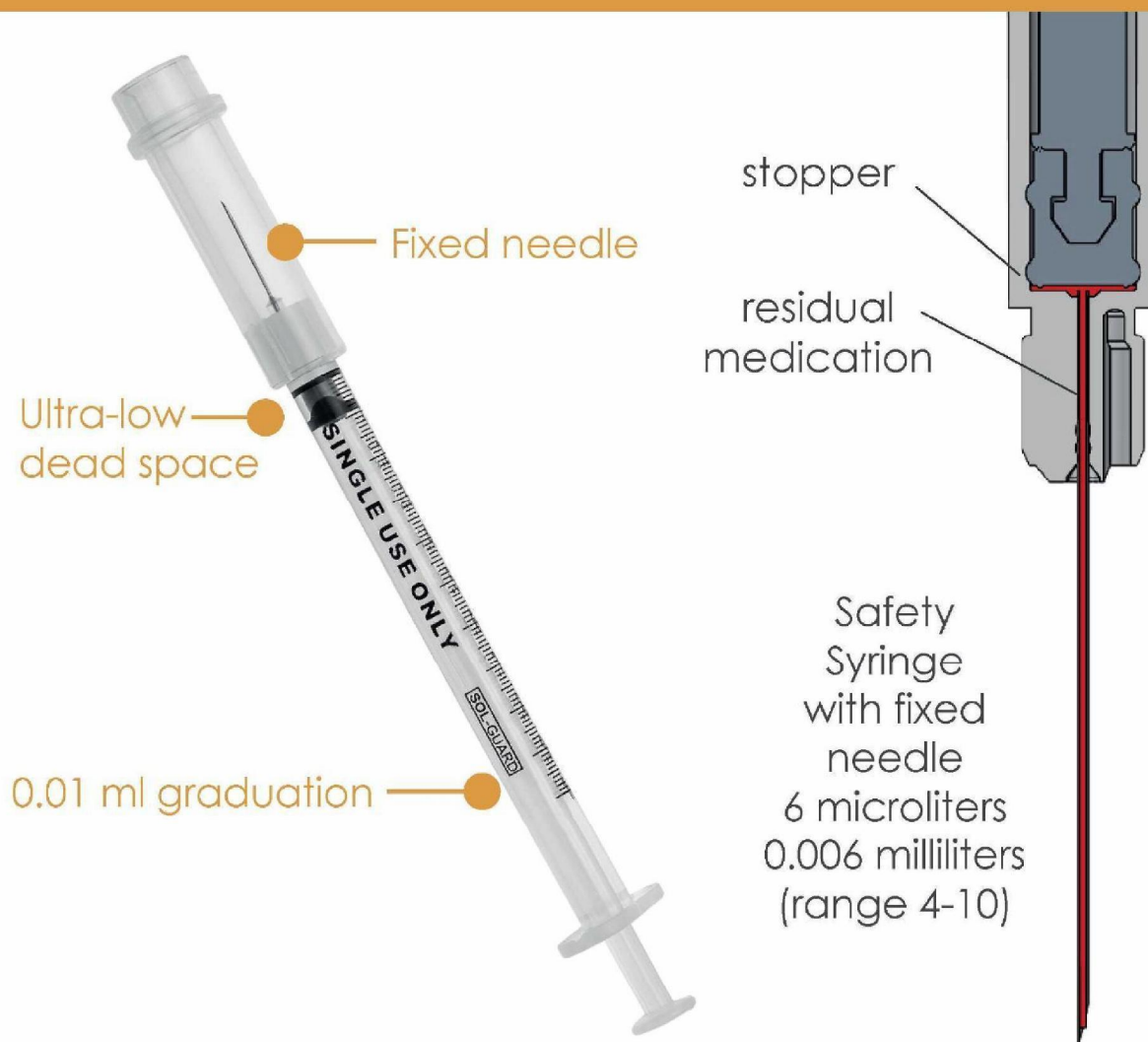
FDA 510k cleared

SOL-CARE™ 1ml Safety Syringe with fixed needle

Reference number	Needle gauge	Needle length		Average dead space	Shelf Box / Shipping Case (pcs)
		mm	in		
100034IM	25 G	25 mm	1"	10 microliters	100/1000

SOL-GUARD™ Safety Syringe

with fixed needle



Immediately following injection, extend the safety shield forward fully until an audible click is heard. To lock the safety shield, twist in either direction until you feel the positive stop and hear an audible click.

CE 2797

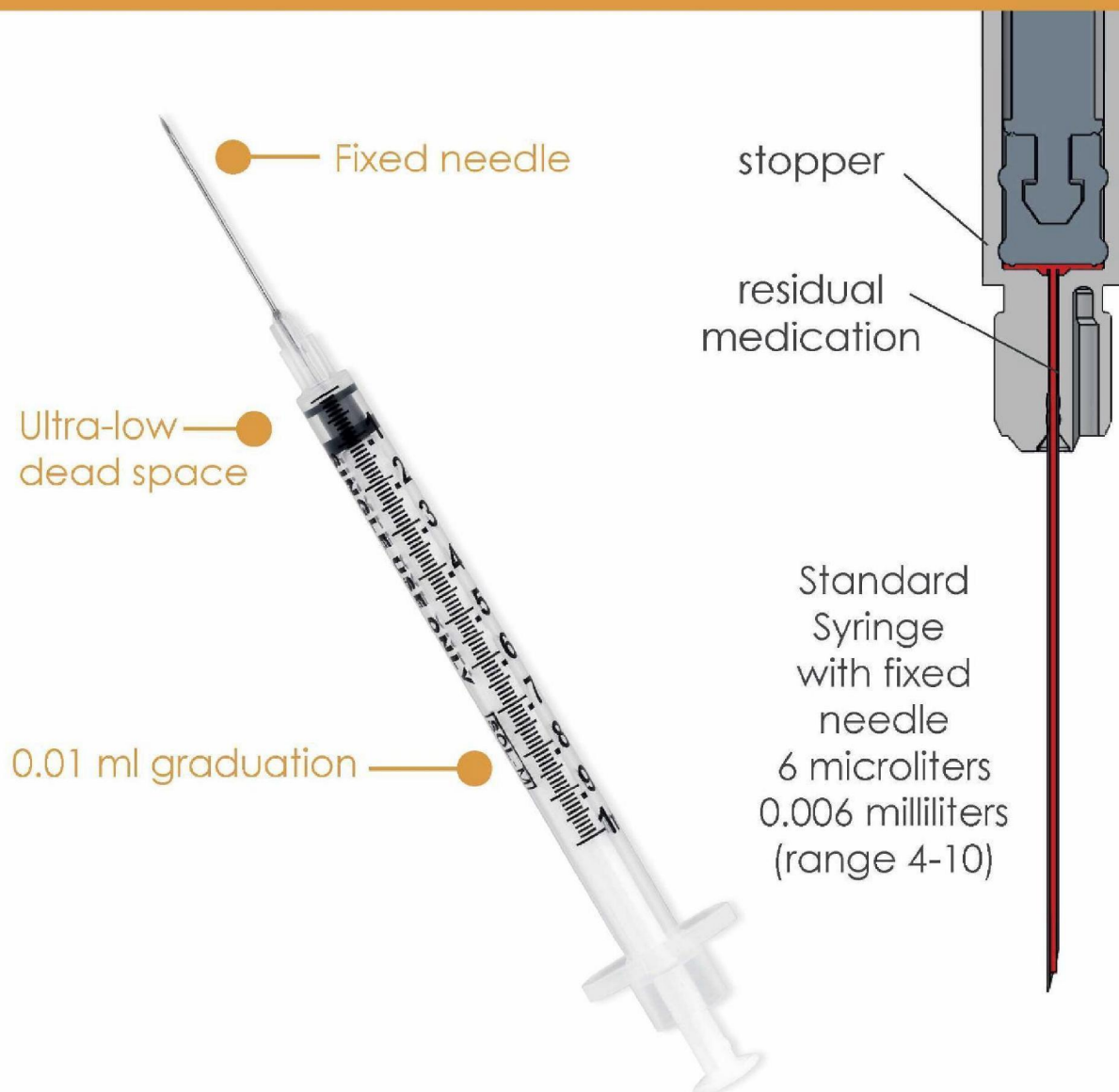
FDA 510k cleared

SOL-GUARD™ 1ml Safety Syringe with fixed needle

Reference number	Needle gauge	Needle length		Average dead space	Shelf Box / Shipping Case (pcs)
		mm	in		
200034SG	25 G	25 mm	1"	6 microliters	100/800

SOL-M™ Syringe

with fixed needle



CE 2797

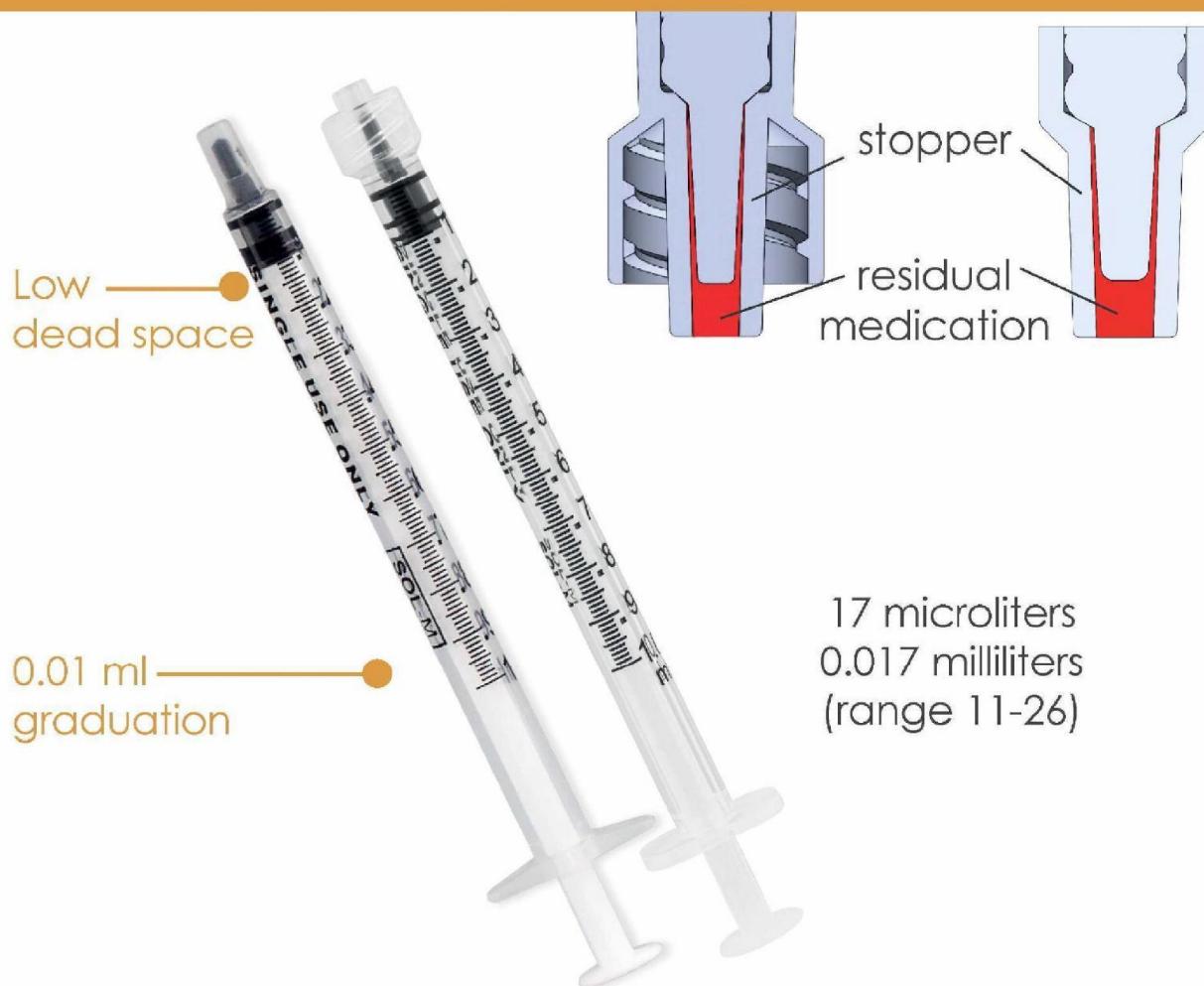
FDA 510k cleared

SOL-M™ 1ml Syringe with fixed needle

Reference number	Needle gauge	Needle length		Average dead space	Shelf Box / Shipping Case (pcs)
		mm	in		
182025	25 G	25 mm	1"	6 microliters	100/800
181023	23 G	25 mm	1"	7 microliters	100/800

SOL-M™ Syringe

Low Dead Space



Ability to change needle for aspiration and injection phase

CE 2797
FDA 510k cleared

SOL-M™ 1ml Slip Tip Syringe w/o Needle (low dead space)

Reference number	Syringe volume	Average dead space	Shelf Box / Shipping Case (pcs)
P180011LDS	1 ml	17 microliters	100/800

SOL-M™ 1ml Luer Lock Syringe w/o Needle (low dead space)

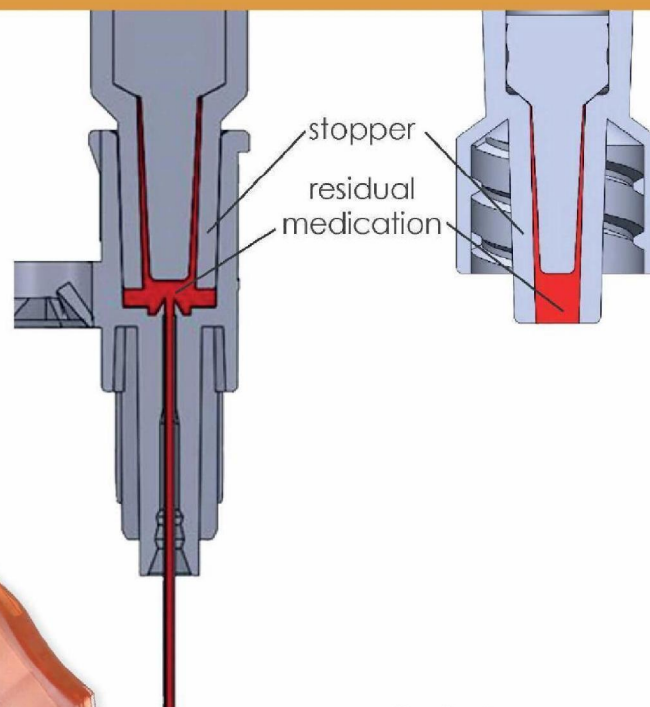
Reference number	Syringe volume	Average dead space	Shelf Box / Shipping Case (pcs)
P180001PP	1 ml	17 microliters	100/800

SOL-CARE™ Syringe Low Dead Space

with Safety Needle Low Dead Space

Low dead space

0.01 ml graduation



Safety Syringe with Needle
 < 30 microliters
 < 0.030 milliliters

Ability to change needle for aspiration and injection phase

CE 2797
 FDA 510k cleared

SOL-CARE™ 1ml Luer Lock Syringe with Safety Needle combo

Reference number	Needle gauge	Needle length		Average dead space	Shelf Box / Shipping Case (pcs)
		mm	in		
12515SN	25 G	40 mm	1 1/2"	< 30 microliters	50/300
12510SN	25 G	25 mm	1"	< 30 microliters	50/300
12558SN	25 G	16 mm	5/8"	< 30 microliters	50/300
12310SN	23 G	25 mm	1"	< 30 microliters	50/300

SOL-CARE™ Safety Needle

Low Dead Space

Easy one-hand technique
of activating protective arm

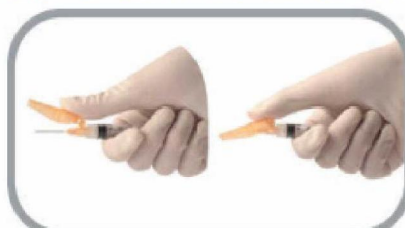
Safety covers sidewalls—
Ensure needle point
containment

Patented locking mechanism—
ensures needle is secure
and completely locked
in protective arm

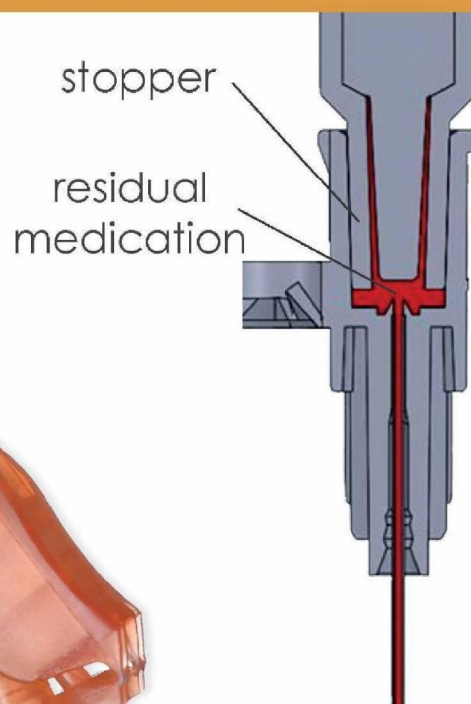
Two options for protective arm activation:



Hard surface
activation



Thumb
activation



Low Dead Space Hub
Reduces the
medication waste

Safety
Needle
< 15 microliters
< 0.015 milliliters

CE 2797

FDA 510k cleared

SOL-CARE™ Safety Needle

Reference number	Needle gauge	Needle length		Average dead space	Shelf Box / Shipping Case (pcs)
		mm	in		
SN2515	25 G	40 mm	1 1/2"	< 15 microliters	100/800
SN2510	25 G	25 mm	1"	< 15 microliters	100/800
SN2558	25 G	16 mm	5/8"	< 15 microliters	100/800
SN2310	23 G	25 mm	1"	< 15 microliters	100/800



For more information, please contact:

Sol-Millennium Medical Inc.
315 Shawnee North Drive, Suite 100, 30024 Suwanee, GA
Tel: 404-973-2200
info@sol-m.com
sol-m.com

CORP-SIN-184-0221_v4