**inSafe System - Directions for Use**

1. Sharps Container Fitting

   1a Remove protective covers from the adhesive pads.

   1b Position the base on a smooth clean worktop and push down firmly to secure.

   1c Slide the container into the base until it clicks into place. Ensure container is secure by pulling forwards against retaining latch.

2. Needle Loading

   2a Align hole on needle adapter with slot on body and push fully home.

   2b Remove rear needle cover and screw needle fully on.

   2c Turn sleeve collar fully clockwise (arrows misaligned).

   Note: Maximum needle length 38mm.

   2d Slide sleeve forward to fully extended position.

   2e Turn sleeve collar fully anti-clockwise to lock* (arrows aligned).

   * WARNING: Ensure that the sleeve lock collar is fully activated. If it is not then accidental needle stick injury may occur.
3. Cartridge Loading

3a Pull plunger back against spring and hold.
3b Slide cartridge into syringe body opening and release plunger to secure.

4. Syringe Use

- Grip sleeve lock collar and turn fully clockwise (arrows misaligned) (2c).
- Slide sleeve fully back.
- Turn lock collar anti-clockwise to lock (arrows aligned) (2e)*.
- Give injection as normal.
- Grip sleeve lock collar and turn fully clockwise (arrows misaligned) (2c).
- Slide sleeve fully forward (2d).
- Turn lock collar anti-clockwise to lock (arrows aligned) (2e)*.
- Repeat above as required for further injections.
- Load new cartridge as shown in section 3.

5. Change Cartridge

- With sleeve in forward locked position hold plunger stem (3a), pull back against spring and hold.
- Grip cartridge with index finger and thumb through upper and lower syringe body apertures.
- Push cartridge upward and back to remove.
- Load new cartridge as shown in section 3.

6. Needle Removal

6a With sleeve locked in the forward position, enter the syringe into the sharps container lid aperture.
6b Holding syringe body, and exerting slight forward pressure, turn the syringe anti-clockwise a small amount to unlock, and push syringe forward into container.
**WARNING: The syringe must be entered fully into the sharps container to engage the ‘lock’. Failure to achieve this may cause accidental needle stick injury.**

7. Sharps Container Removal

- When the container has been filled to the maximum indicator line disposal is required.
- Close the forward and rear container apertures and push fully home to lock.
- Press down on the lower latch feature (6c) on the base and pull the container forward and away from the base.
- Holding the container by the attached handle remove it to a safe area for disposal collection.
- Load an empty container onto the base as shown in section 1.

8. Cleaning and Sterilising

Cleaning:
- Wash the surface of the syringe to remove debris, blood or saliva that may be present.
- After cleaning, disinfect and sterilise the syringe according to your practice infection control protocols, and the following directions.

Disinfection:
- The syringe should be disinfected using a registered hospital use surface disinfectant.
- Apply the disinfectant by wiping onto the external surfaces of the syringe using a suitable towel or cloth. Do not spray directly onto the syringe surfaces. Do not disinfect the syringe by immersion.

Sterilisation:
- Following cleaning and disinfection, as above, unscrew the plunger retaining nut and separate the plunger assembly. Place both syringe parts in a suitable autoclave pouch.
- Place in an autoclave and sterilised using a standard steam autoclave cycle to 134°C for a minimum of 3 minutes.
- Use only steam autoclave sterilisation method.

**Note:** Do not remove and load a second needle onto the same syringe during a patient procedure. If a new needle is required then use a clean sterilised syringe.
9. Change Outer Sleeve

9a Unlock and move sleeve to position shown.

9b Insert suitable tool into slot in collar, push down and separate collar from sleeve.

9c Remove small locking piece and slide sleeve off syringe body.

9d Replace sleeve with new part, insert locking piece, push tab inward and slide collar into place. Check operation of lock collar and sliding action.

10. Syringe Type

Standard Syringe

Syringe option with ‘T’ plunger handle and plain plunger end is non-aspirating.

Aspirating Syringe

(a) Cartridge Seal Type

- With the syringe needle and cartridge loaded as above push lightly on the plunger to engage the plunger end into the cartridge bore.
- Prior to giving the injection expel a small amount of anaesthetic.
- Enter the needle into the tissue of the desired operation site.
- When the required needle penetration depth is reached draw back the syringe plunger slightly (2mm) and check for signs of blood in the forward (needle distal end) area of the cartridge.
- If blood is evident withdraw the needle and re-enter the tissue at a different site. Repeat the above until no blood is seen.
- At that point administer the amount of anaesthetic required.
(b) **Self Aspirating Cartridge Type**
- With the syringe needle and cartridge loaded as above engage the plunger end into the cartridge recess and expel a small amount of anaesthetic.
- Enter the needle into the tissue of the desired operation site.
- When the required needle penetration depth is reached release pressure on the plunger and check for signs of blood in the forward (needle distal end) area of the cartridge.
- If blood is evident withdraw the needle and re-enter the tissue at a different site. Repeat the above until no blood is seen.
- At that point administer the amount of anaesthetic required.

(c) **Harpoon Type**
- Load the anaesthetic cartridge as above.
- Move the plunger to engage with the cartridge rubber bung.
- Holding the syringe body firmly, and vertically, tap the plunger ring firmly onto a worktop so that the harpoon enters and engages with the rubber material.
- Load the syringe needle as above.
- Enter the needle into the tissue of the desired operation site.
- When the required needle penetration depth is reached draw back the syringe plunger slightly and check for signs of blood in the forward (needle distal end) area of the cartridge.
- If blood is evident withdraw the needle and re-enter the tissue at a different site. Repeat the above until no blood is seen.
- At that point administer the amount of anaesthetic required.
- When the cartridge is empty pull the plunger back fully to release the harpoon from the bung. Do not hold the cartridge whilst pulling the plunger back.

(d) **3-Point Harpoon Type (German market)**
- Load the anaesthetic cartridge as above.
- Move the plunger to engage into the cartridge bung.
- Load the syringe needle as above.
- Enter the needle into the tissue of the desired operation site.
- When the required needle penetration depth is reached draw back the syringe plunger slightly and check for signs of blood in the forward (needle distal end) area of the cartridge.
- If blood is evident withdraw the needle and re-enter the tissue at a different site. Repeat the above until no blood is seen.
- At that point administer the amount of anaesthetic required.
- When the cartridge is empty pull the plunger back fully to release the harpoon from the bung. Do not hold the cartridge whilst pulling the plunger back.

**IMPORTANT NOTICE– PLEASE READ**

inSafe local anaesthetic Syringe System is intended for use solely by appropriately qualified or trained dentistry professionals and staff and is designed for use solely with inSafe disposable needle adapters. To avoid physical harm to patients, or damage to equipment and/or malfunction, use only adapter and other syringe components made by Astek Innovations Limited for the inSafe Syringe System, and always follow the manufacturer’s instructions and recommendations. Failure to do so will be entirely at the user's own risk and Astek Innovations Limited cannot be responsible for any loss or damage arising in any way as a result of a failure to follow such instructions and recommendations. Any express or implied warranty is excluded to the extent permitted at law.”