

# Onpharma®

Making Local Anesthetic Better



**Onset®** | Buffering System  
✓ Articaine ✓ Lidocaine ✓ Mepivacaine ✓ Prilocaine

Reference Guide

# Onset<sup>®</sup> Buffering System

✓ Articaine ✓ Lidocaine ✓ Mepivacaine ✓ Prilocaine

Designed for safety and precision, the Onset Mixing Pen conveniently provides a method for healthcare professionals to precisely and safely mix two parenteral solutions prior to injection.

This Reference Guide provides a brief overview of setting up the pen and mixing two solutions together using an Onset Cartridge Connector (sold separately by Onpharma). For more information, please refer to the Instructions for Use provided with the Onset Mixing Pen.

In this Reference Guide, 3 mL cartridge refers to the sodium bicarbonate pH buffer solution sold by Onpharma, while 1.7 mL cartridge refers to Lidocaine, Mepivacaine, Prilocaine, or Articaine solutions sold by third parties.

**Use Onset with all your local anesthetic injections to give you more control of your daily schedule.**

- Onset can help maximize the predictability on same day procedures, even in those patients with infections.
- After giving the injection buffered with Onset, stay with your patient instead of leaving the operatory.
- Using Onset you can begin your procedure much sooner versus using un-buffered local anesthetic.



## Onset Mixing Pen

The Onset Mixing Pen is a high-precision dispensing device for mixing two solutions together. The pen is used to dispense a solution from a standard 3 mL cartridge to a second fluid container, allowing the solutions to be mixed via a sterile fluid path. For example, the pen may be used to dispense sodium bicarbonate 8.4% USP buffer solution to a standard 1.7 mL cartridge of lidocaine with epinephrine to mix the solutions.

## Onset Mixing Pen Parts

- 1** - Chamber Barrel **2** - Cartridge Window **3** - Piston Rod **4** - Reset Mechanism **5** - Volume Window **6** - Volume Dial **7** - Dispensing Button



## Buffering Chart

Dial 9	
For all infiltrations and all blocks with these formulations.	
	2% lidocaine 1:100,000 Ephinephrine
	2% lidocaine 1:50,000 Ephinephrine
	4% Articaine 1:100,000 Ephinephrine
	4% Articaine 1:200,000 Ephinephrine
	3% Mepivacaine
	4% Prilocaine
	4% Prilocaine 1:200,000 Ephinephrine

## Prime the Onset Mixing Pen

### 1: Reset Piston Rod

Unscrew the dosing mechanism from the cartridge chamber and check to make sure the piston rod is fully retracted.

If the piston rod is not fully retracted, as in **Figure 1**, grip the red reset mechanism with your thumb and forefinger and turn the dosing mechanism counter clockwise until the piston rod is fully retracted, as in **Figure 2**.



### 2: Insert a 3 mL Cartridge

Insert a 3 mL cartridge (such as sodium bicarbonate 8.4% pH buffer solution) into the small end of the pen's cartridge chamber with the septum entering first, then reattach the dosing mechanism.



### 3: Prime the Onset Mixing Pen

After loading a new 3 mL cartridge, you must first prime the pen to ensure the piston rod makes contact with the 3 mL cartridge.



The 3ml cartridge contains spacer in addition to the stopper. Prime against the spacer by dialing the pen to a low setting (such as 9) and gently push the center of the dispensing button straight down until you feel the piston rod make contact with the 3 mL cartridge.

### Prime the Onset Mixing Pen

It is important to depress the button straight down in a vertical position to decrease the possibility of the pen jamming. You may need to repeat this step if the volume dial reaches **0** and you have not yet felt the piston rod make contact with the cartridge.

When the piston rod is in the proper position after priming successfully, the dial will not go all the way to the 0 setting. Turn the volume dial back to 0 before mixing your first cartridge, as shown in.



*For best results, use the 3 mL cartridge of Sodium Bicarbonate within a 5-day period once released from the pressurized tray.*

### 4: Attach an Onset Cartridge Connector

Remove an Onset Cartridge Connector from its sterile pouch and, using aseptic technique, carefully remove the safety cap.

Align the arrow on the cartridge connector with **Position #1** on the pen.

Push the cartridge connector in approximately one-quarter inch until you hear a **"click."**

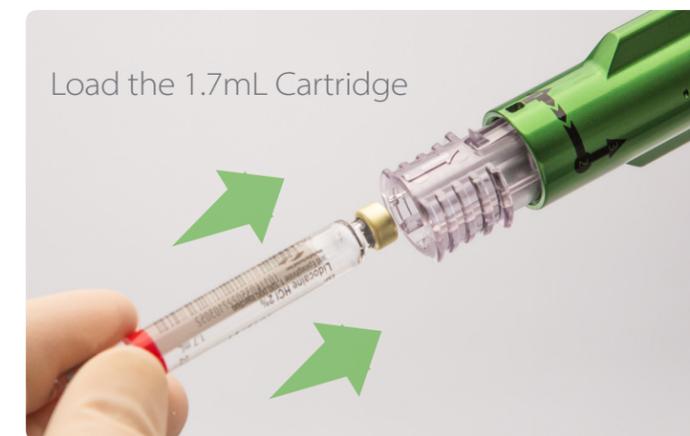


### Load a 1.7 mL Cartridge

#### 5: Load a 1.7 mL Cartridge

Load a 1.7 mL cartridge (for example, a 1.7 mL cartridge of lidocaine with epinephrine) into the Onset Cartridge Connector with the septum entering first, pushing straight and firmly into place.

*Check that the 1.7 mL cartridge is fully seated by making sure the metal cap is hidden from view in the pen.*



#### 6: Lock the 1.7 mL Cartridge

Lock the 1.7 mL cartridge in place by rotating it clockwise to **Position #2**, approximately one-quarter turn. Push straight forward into **Position #3**.



#### 7: Dial Volume to Be Dispensed

Dial the desired volume of solution to be mixed. For example, you may dial the pen to "9" (.09 mL) to mix sodium bicarbonate 8.4% pH buffer solution with a standard cartridge of lidocaine with epinephrine. This represents a 19:1 ratio of lidocaine with epinephrine to sodium bicarbonate.



## Mix Solution

### 8: Dispense Solution to Mix

Depress the center of the dispensing button all the way. Do not force the button. Press gently along the pen axis until the volume window returns to 0.

It is important to push the dispensing button straight in, without pressing against the rotating dial or pressing at an angle. If the button will not depress smoothly or seems stuck, check to make sure the rotating dial is not caught on your thumb or glove while pushing in.

In most cases, relaxing the pressure of your thumb on the dispensing button and then resuming that pressure will return the pen to proper functions. You may also try tapping with your thumb or finger on the top of the button to move it along.

**Note:** NEVER force the button as this may damage the pen mechanism. In case of a pen with a jammed dosing mechanism, sometimes the mechanism is stuck and dialing to 60 may clear the jam. If not, please contact customer care.

*For best results, use the 3 mL cartridge of Sodium Bicarbonate within a 5-day period once released from the pressurized tray.*

Push Dispensing Button



### 9: Unlock the 1.7 mL Cartridge

To unlock the mixed 1.7 mL cartridge, pull the Onset® Cartridge Connector straight out, approximately one-quarter inch to **Position #2**

Turn the connector counterclockwise back to **Position #1**.



## Remove Mixed Cartridge

### 10: Removal of Mixed 1.7 mL Cartridge

Remove the mixed 1.7 mL cartridge by pulling it straight out. Use immediately.

**Note:** Always inspect any solution prior to use. Do not use if solution is cloudy. Use combined solutions immediately. **Do Not Store.**



*Once the solutions are mixed, start your injection within one minute for best results.*

## Reloading the Onset Mixing Pen

Once the 3 mL cartridge (such as sodium bicarbonate 8.4% pH buffer solution) is empty, remove it from the pen by unscrewing the dosing mechanism. You will also need to remove the Cartridge Connector in conjunction. Check to make sure the Onset Cartridge Connector arrow is in **Position #1**, then push in the two locking levers with your thumb and forefinger and carefully pull the connector out. Dispose in a sharps container.

**Follow steps 1-4 to reload the pen.**



To ensure best results, a new sodium bicarbonate cartridge must be used within a 5-day period.

## Cleaning the Onset Mixing Pen

Clean the inside of the cartridge chamber with warm water and soap using the cleansing brush.

**Use a disinfectant wipe for the dosing mechanism. Do not autoclave the dosing mechanism.**





Have a  
Question?

Call the Onset Team

**On**pharma<sup>®</sup>

We are here to help you make your local anesthetic better and more predictable.

**Training & Sales**

**877.336.6738** Prompt #2:  
training@onpharma.com

**Customer Care**

**877.336.6738** Prompt #1:  
customer@onpharma.com

**Hours:**

Mon-Thurs 7AM - 5PM PST  
Friday 7AM - 2PM PST

Please see accompanying package insert and usage instructions.

These materials are copyrighted by Onpharma Co., 2019. MK047, Rev. C