

## **USER GUIDE**

# LONG ACTING INJECTABLE ADAPTER, USP 2 (part number 122630)

The Long Acting Injectable Adapter, USP 2, enables dissolution testing of long-acting injectables and other extendedrelease dosage formulations using a USP 2 Dissolution Apparatus. The adapter accommodates samples from 5  $\mu$ L – 100  $\mu$ L in volume.

## EQUIPMENT AND MATERIALS

- Solution Contemporation State Adapter, USP 2 (part number 122630)
- ✓ 15mm diameter Microfiber glass filter membranes (choose a pore size appropriate for the particle size of the formulation under investigation)
- ✓ Tweezers
- 🧭 Long Tongs

## **INSTRUCTIONS**

#### Unpacking

- Unpack components from the packaging.
- Clean both components with isopropyl alcohol IPA.



#### Activation of filter membrane

• Soak the microfiber membrane to soak in de-ionized water for at least one hour to activate the filter membrane.



Filter Cap



Sample Holder

### Assembling the LAI adapter

- Place both filter cap and sample holder on a stable, clean surface.
- Carefully position the microfiber glass filter onto the filter cap.





Gently press the filter to the plastic ring to ensure it adheres properly.

#### Sample Loading



Load up formulation into the sample holder cavity. Avoid any disturbance to the sample holder to prevent the formulation from spreading.



Gently snap the filter cap onto the sample holder with minimal disturbance.



#### Introducing LAI adapter into USP 2 apparatus

- Confirm the USP 2 apparatus is ready for use. The vessels should be pre-filled with media and equilibrated at the desired temperature.
- Carefully hold the adapter with a pair of long tongs and gently place it into the bottom of the dissolution vessel. This step should be performed slowly and steadily with utmost care.



#### Cleaning of adapter

- Once the test is completed, carefully remove the adapter from the vessel and disassemble it. Dispose the filter membrane in an appropriate waste container.
- Place both parts of the adapter in IPA or ethanol and sonicate for 15 minutes.
- Repeat the sonication step using clean deionized water.
- Rinse the adapter thoroughly with deionized water and allow it to dry.



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