

## SOP\_MTL-1.7 Surgical Pack Preparation

- A. Purpose:** Provide the steps and tools required to properly prepare a sterile surgical pack for use in rodent procedures.
- B. Scope:** Surgical packs can be used in all the animal protocols that utilize surgical procedures.
- C. Definitions:** NA
- D. Materials and Reagents:**

| Name  | Quantity                | Cat number                     | Sterility status for use |
|---|-------------------------|--------------------------------|--------------------------|
| 27g Hypodermic Needles  | 1 per model             | 14-826-48, Fisher scientific   | Sterile                  |
| Absorbent underpads -white spunbound polypropylene facing sheet with blue polypropylene backing sheet | 1                       | 56617-006, VWR                 | Non-sterile              |
| Cotton tip applicator   | 3 per mouse             | 22-363-168, Fisher scientific  | Non-sterile              |
| Instant sealing sterilization pouch (large)   | 2                       | 01-812-57, Fisher scientific   | Non-sterile              |
| Jeweler's forceps   | 1 per model             | RS-5069, Roboz Surgical        | Non-sterile              |
| Large autoclave container   | 1                       | 13-359-20B Fisher scientific   | Non-sterile              |
| Micro dissecting spring scissors (fat pad cutter)   | 1 per model             | RS-5658BT, Roboz Surgical      | Non-sterile              |
| OK™ Steam Sterilization Monitor Strips, 4"  | 2                       | 26410100, Propper              | Non-sterile              |
| Regular forceps   | 1 per model             | RS-5139, Roboz Surgical        | Non-sterile              |
| Rubber surgical pad   | 1                       | RS-S40-28, MSC                 | Non-sterile              |
| Sterile surgical drape  | 1                       | 50-118-0337, Fisher scientific | Sterile                  |
| Surgical scissors   | 1 per model             | RS-5960, Roboz Surgical        | Non-sterile              |
| Tin foil 4x4 inches   | 2                       | (any grocery store)            | Non-sterile              |
| Tissue forceps (claw forceps)   | 1 per model             | RS-5158, Roboz Surgical        | Non-sterile              |
| Wound clip applicator   | 1                       | 427630, BD                     | Non-sterile              |
| Wound clip remover  | 1                       | 427637, BD                     | Non-sterile              |
| Wound clips   | 2/mouse + 1 extra strip | 01-804-5, BD                   | Non-sterile              |

- E. References:** NA

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### F. Procedures:

#### General Considerations:

All components of the surgical pack are unsterile prior to autoclaving. After autoclaving, handle the surgical pack carefully to prevent bag rupture and loss of sterility. In order to ensure both the surgery board and the tools remain sterile while setting up for surgeries, they will be autoclaved in separate bags.

One set of surgical tools contains the following: surgical scissors, regular forceps, claw forceps, jeweler's forceps, fat pad cutter, wound clip applicator, and wound clip remover.

1. Surgical pack #1 will contain the rubber surgical board, a surgical drape, an absorbent underpad, and an OK strip.
  - 1.1. Place all items listed in step 1 into the instant sealing sterilization pouch. Stack them as follows: Absorbent underpad, rubber surgical board, OK strip and the sterile drape on top. This will ensure that, when the bag is opened, the sterile drape can be taken out first and placed in the hood to provide a sterile work area to wrap the rubber surgical board in the absorbent underpad.
  - 1.2. Seal the pouch and label with the date and lab identification.
2. The surgical pack #2 will contain surgical tools and the rest of the supplies needed for surgeries.
  - 2.1. Take a surgical drape, cut in half transversely, and lay one half out on the bench top.
  - 2.2. Cut the other half into small sections to be used as surgical drapes. Small rectangular holes should be cut into the middle that are the size of the surgical area.
  - 2.3. Center the appropriate number of sets of surgical tools (one per model up to 4), cotton swabs, wound clips, 27g needles, tin foil pieces, and one OK strip on the drape and fold up into a pouch to contain the supplies.  
Note: If there are too many cotton swabs, they may be autoclaved in their own pouch or in the wrapper they come in if it has an autoclave indicator.
  - 2.4. Place pouch with the supplies and all other items listed into the instant sealing sterilization pouch.
  - 2.5. Seal the pouch and label with the date and the lab identification.
3. Place autoclave bags into a large autoclave container. Do not stack the bags as it may prevent proper steam penetration during the autoclave process.
4. Place container with autoclave bags into autoclave and set autoclave to run on Gravity setting for 40 minutes at 121.0°C, 15psi.
5. After cycle is complete, remove autoclave container from autoclave. Caution: contents inside autoclave may be hot.
6. Inspect the lip of the autoclave bags to ensure that proper steam temperature was reached. If steam QC labels are positive, then the surgical pack is sterile and ready for use in the sterile surgery suite.
7. Once the packs are opened in the surgical hood, check the OK strips to ensure proper sterilization throughout the pack. If the strip is not completely black the pack is not considered sterile and will have to be re-autoclaved.

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### G. Revisions log:

| Version | Revision Date | Section Revised | Notes       |
|---------|---------------|-----------------|-------------|
| 1       | 03.30.2021    | All             | SOP created |