I. PURPOSE

1. To ensure the uniformity of labeling of all reagents used in the animal facilities.

II. RESPONSIBILITY

1. All program staff contributes to the accurate and consistent labeling of all reagents.

III. PROCEDURES

1. All reagents and solutions removed from their original container, and are not designated for immediate and complete use, shall be labeled to indicate identity, titer or concentration, storage requirements (if requires specific storage requirements), and expiration date, if applicable.

   a. The attached label is to be used in all animal facilities and will be purchased from Lab Safety, catalog #9B-18007
   b. Indicate reagent name on first line, mixture or concentration and specific storage requirements on second line, and date preparation expires on third line. If an expiration date cannot be determined then on the third line record the date the solution was prepared or placed in the container, or date original container was opened and clearly identify what the date represents (e.g. prepared, filled, or opened).
   c. Check appropriate box on left side of label to indicate concerns expressed by SDS. H = health hazard, F = flammability, R = reactivity, PE = use of protective equipment recommended.
   d. All entries will be made with permanent ink sharpie.
   e. Outdated reagents and solutions shall not be used.
   f. Reagents without labels or containing illegible labels shall not be used.
   g. Reagents appearing deteriorated shall not be used.

2. Disinfectants approved for use:
a. **Decon-Spore 200 Plus**
   - **Active ingredient** - peracetic and hydrogen peroxide solution
   - **Preparation** – 6.0 ml/gal water
   - **Safety** - strong oxidizer and corrosive-use in a well-ventilated area
   - **PPE** - gloves and eye protection when handling/mixing concentrate
   - **Uses** - sanitizing floors throughout the animal facility and sanitizing water bottle stoppers and sipper tubes by soaking for 10 minutes prior to washing.
   - **Specific uses** - Mopping floors and floor machine
   - **Efficacy** - Staphylococcus aureus, Enterobacter aerogenes, Escherichia coli, Listeria monocytogenes, Salmonella typhimurium, Psuedomonus aeruginosa, and Saccharomyces cerevisiae
   - **Contact time** - 5 minutes at ambient temperature.

b. **Sporicidin**
   - **Active ingredient** - phenol solution
   - **Preparation** - used undiluted
   - **Safety** – may cause eye irritation; avoid contact with skin or clothing
   - **PPE** – gloves and eye protection recommended
   - **Uses** - general disinfectant and deodorizer for hard non-porous surfaces that do not come in contact with animals. If used on surfaces that come in contact with animals, surface must be rinsed with alcohol and allowed to dry prior to animal contact.
   - **Specific Uses** - medical equipment, countertops, carts, and walls
   - **Efficacy** - germicidal including vegetative organisms, passes AOAC efficacy standards for institutional and hospital disinfection
   - **Contact time** – 5 minutes for viruses, 10 minutes for bacteria

c. **Chlorhexidine**
   - **Active ingredient** –chlorhexidine gluconate solution
   - **Preparation** - diluted 1 oz:1 gallon water
   - **Safety** – corrosive, avoid contact with eyes and skin
   - **PPE** – gloves and eye protection when handling/mixing concentrate
   - **Uses** - bacteriostatic and bactericidal, general disinfectant for use on rubber and surgical equipment.
   - **Specific uses**- anesthesia breathing hoses, bellows, flutter valves and hard non-porous surfaces of surgical monitoring equipment.
   - **Efficacy** - broad-spectrum biocide effective against Gram-positive bacteria, Gram-negative bacteria and fungi. Effective against many viruses.
   - **Contact time** - 1 minute

d. **Oxivir**
   - **Active ingredient** –accelerated hydrogen peroxide solution
   - **Preparation** – Oxivir Tb and Oxivir wipes are ready to use. Oxivir Five 16 concentrate is diluted 1 part concentrate: 16 parts water
   - **Safety** – excellent safety, avoid contact with eyes and skin
   - **PPE** – gloves and eye protection when handling/mixing concentrate
   - **Uses** -general disinfectant for hard non-porous surfaces in laboratory animal procedural areas and for surfaces that come in contact with animals.
   - **Specific uses**- forceps or gloved hand-dipping between handling animals, biosafety cabinet chambers, animal restrainers/containers used in
imaging (e.g., irradiator pie cages, anesthetic chambers/nose cones, MRI/Xenogen chambers, behavioral equipment)

**Efficacy** – virucide, bactericide, fungicide, mildewcide.
**Contact time** – Disinfects in 1 minute; Tuberculocidal in 5 minutes

e. **Quatricide PV-15**

- **Active ingredient** – quaternary ammonia
- **Preparation** – 1:256 dilution (1/2oz. or 15ml Quat/1 gallon water) good for 14 days
- **Safety** – gloves and eye protection when handling/mixing concentrate
- **PPE** – gloves and eye protection when handling/mixing concentrate.
- **Uses** – general disinfectant/detergent for hard non-porous surface disinfection
- **Specific uses** – Cat room floors (free roaming cats), refrigerated truck box.
- **Efficacy** – Fungicidal, bactericidal and virucidal
- **Contact time** – 10 minutes

f. **Bleach 10%**

- **Active ingredient** – sodium hypochlorite
- **Preparation** – 1:10 dilution (1 part household bleach: 9 parts H2O) good for 1 week
- **Safety** – corrosive, avoid contact with eyes and skin
- **PPE** – gloves and eye protection when handling/mixing concentrate.
- **Uses** – High level disinfectant suitable for BSL-2&3, ABSL-2 & 3 disinfection of hard surfaces.
- **Specific uses** – counter tops, carts, Biosafety cabinets. After appropriate contact time metal surfaces should be rinsed/wiped with alcohol.
  (must be followed with alcohol rinse).
- **Efficacy** – virucide, bactericide, fungicide, mildewcide
- **Contact time** – 10 minutes for hard non-porous surface disinfection; 15-20 minutes for biohazard protocols.

### 5. **ACCEPTABLE HARD SURFACE DISINFECTANTS** (e.g., table tops, equipment).

<table>
<thead>
<tr>
<th>NAME</th>
<th>EXAMPLES</th>
<th>COMMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quaternary Ammonium</td>
<td>Roccal®, Cetylicide®</td>
<td>Rapidly inactivated by organic matter. Compounds may support growth of gram-negative bacteria.</td>
</tr>
<tr>
<td><strong>Chlorine</strong></td>
<td>Sodium hypochlorite (Clorox ® 10% solution) Alcide®</td>
<td>Corrosive. Presence of organic matter reduces activity. Chlorine dioxide must be fresh (&lt;14 Days old); kills vegetative organisms within 3 minutes of contact.</td>
</tr>
<tr>
<td>Aldehydes</td>
<td>Glutaraldehyde (Cidex®, Cidex Wipes®)</td>
<td>Rapidly disinfects surfaces. Toxic. OSHA has set exposure limits.</td>
</tr>
<tr>
<td>Hydrogen Peroxide</td>
<td>Oxivir Bioquell HPV 30%</td>
<td>Effective disinfectant, useful in deconning rooms, hard surfaces, non-corrosive.</td>
</tr>
<tr>
<td>Phenolics</td>
<td>Lysol®, TBQ®, Sporicidin</td>
<td>Less affected by organic material than other disinfectants.</td>
</tr>
<tr>
<td>Chlorhexidene</td>
<td>Nolvasan®, Hibiclens®</td>
<td>Presence of blood does not interfere with activity. Rapidly bactericidal and persistent. Effective against many viruses.</td>
</tr>
<tr>
<td>0.6% ortho-Phthalaldehyde</td>
<td>Metricide OPA Plus</td>
<td>Presence of protein or bioburden will decrease activity. Contact time is 12min on hard surfaces; rinse with sterile water if using on surfaces that will touch the animal.</td>
</tr>
</tbody>
</table>

* The use of brand names as examples does not indicate a product endorsement. Always follow manufacturer's instructions.
6. **ACCEPTABLE METHODS OF INITIAL INSTRUMENT STERILIZATION OR HIGH LEVEL DISINFECTION**

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<tr>
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<tbody>
<tr>
<td>Physical: Steam sterilization</td>
<td>Autoclave</td>
<td>Effectiveness dependent upon temperature, pressure and time (e.g., 121°C for 30 min. vs. 132°C for 15</td>
</tr>
<tr>
<td>Chlorine</td>
<td>Chlorine Dioxide (Alcide®)</td>
<td>Presence of organic matter reduces activity. Must be freshly made (&lt; 24hrs)</td>
</tr>
<tr>
<td>Aldehydes</td>
<td>Formaldehyde (6% sol.), Glutaraldehyde</td>
<td>Many hours required for sterilization. Corrosive and irritating. Consult safety representative on proper use.</td>
</tr>
<tr>
<td>0.6% ortho-Phthalaldehyde</td>
<td>Metricide OPA Plus</td>
<td>Presence of protein or bioburden will decrease activity. Contact time is 12min for instruments/equipment/catheter high level disinfection; then immerse in sterile saline for one minute and flush lumens with sterile saline</td>
</tr>
</tbody>
</table>

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1 Instruments must be rinsed thoroughly with sterile saline to remove chemical sterilants before being used.

7. **ACCEPTABLE SKIN DISINFECTANTS**

<table>
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<tr>
<th>NAME</th>
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<tbody>
<tr>
<td>Chlorhexidine</td>
<td>Nolvasan®, Hibiclens®</td>
<td>Rapidly bactericidal and persistent. Effective against many viruses. Excellent for skin. Presence of blood does not interfere with activity.</td>
</tr>
</tbody>
</table>

* The use of common brand names as examples does not indicate a product endorsement.

**NOTE:** Alternating disinfectants is more effective than using a single agent. For instance, an iodophore scrub can be alternated with alcohol, followed by a final soaking with a disinfectant solution. Alcohol, by itself, is not an adequate skin disinfectant. The evaporation of alcohol or alcohol-based products can induce hypothermia in small animals.

8. **ACCEPTABLE INSTRUMENT STERILIZATION OR HIGH LEVEL DISINFECTION BETWEEN SURGERIES**

<table>
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</tr>
</thead>
<tbody>
<tr>
<td>Heat</td>
<td>Hot Bead Sterilizer</td>
<td>Used to resterilize instrument tips. Remove gross contamination before using. After “hot bead,” rinse instrument with sterile saline to cool.</td>
</tr>
</tbody>
</table>

*The use of common brand names as examples does not indicate a product endorsement.

1 Instruments must be rinsed thoroughly with sterile water or saline to remove chemical sterilants before being used.

Approved: Date: