

STANDARD OPERATING PROCEDURES
DIVISION OF COMPARATIVE MEDICINE
UNIVERSITY OF SOUTH FLORIDA

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TITLE: **DEMA® Mixrite Model 577 Proportioning Pump**
SCOPE: Animal Care Personnel
RESPONSIBILITY: Facility Manager, Animal Care Personnel, Maintenance Support and Cage Wash Personnel
PURPOSE: To Outline Proper Procedures for Use of the DEMA® MixRite Pump to Dilute Decon-Spore 200

I. PURPOSE

1. To describe to use, maintenance, and calibration of a DEMA Mixrite proportioning pump used to dilute Decon-Spore 200 for sanitization of floors within the animal facility.

II. RESPONSIBILITY

1. It is the responsibility of the Facility Manager to ensure that equipment is appropriately maintained in good working order, and calibrated.
2. It is the responsibility of the Facility Manager to ensure all staff using this equipment are adequately trained in the use of Decon-Spore dilutor.
3. It is the responsibility of all staff using the Decon-Spore Dilutor to read and understand this procedure and wear the appropriate personal protective equipment (PPE) while doing so.

III. PROCEDURE

1. The DEMA® Mixrite proportioning pump allows a chemical product to be pumped at a preset constant mix ratio of a flow range of 0.09 to 11 GPM. The unit consists of a water inlet, a pickup tube to pull the chemical into the mixing unit, and an outlet to dispense the diluted chemical.
2. During installation the pump is calibrated to **dispense 5-6 ml of Decon-Spore 200 per gallon of water** discharged.
3. Decon-Spore 200 is used in animal rooms, procedural areas, and facility hallways to sanitize floors.
4. **Decon-Spore 200 is considered a strong oxidizer and corrosive.** Consequently, it must be used in a well ventilated areas and **PPE is required when handling**

concentrate (i.e., rubber gloves, eye protection and mask. A face shield is recommended when performing procedures that may cause splashes). **Avoid/skin contact, inhalation, and ingestion** particularly when handling concentrate.

5. Prior to placing the suction tube into a new gallon of Decon-Spore 200 the calibration of the unit must be verified it is dosing accurately.
 - a. While wearing the appropriate PPE the suction tube is carefully removed from the empty Decon-Spore container.
 - b. The suction tube is placed in a 50ml conical tube filled with water to the 35 ml mark.
 - c. Turn dispenser/hose on and fill a mop bucket to the 4 gallon mark.
 - d. Total volume of water removed from the 50 ml conical tube divided by 4 equals the average milliliters dispensed/gallon. Record this dose rate and the date on the new Decon-Spore container with a permanent marker.
 - e. If the average amount of water dispensed is not between 5-6 ml/gallon, notify the Facility Manager that the dilutor must be re-calibrated.
6. Decon-Spore 200 is corrosive and over time the seals/orifices will need to be replaced. If the unit cannot be calibrated to dispense 5-6ml /gallon the unit is replaced.
7. To prolong the proper functioning of the unit, all dilutors are flushed with fresh water at the end of the day.

IV. SAFETY CONSIDERATION

1. Decon-Spore 200 will burn skin or eyes. USE CAUTION WHEN WORKING WITH. If splashed on skin, rinse area using clean running water immediately. If splashed into eyes; rinse eye with eye wash/eyewash bottle.
2. Always wear a mask, eye protection, and rubber gloves when using concentrated Decon-Spore 200. A face shield is recommended.
3. Be careful not to splash the diluted Decon-Spore during filling mop buckets and when mopping floors.
4. Report any accidents to your supervisor immediately.

V. REFERENCES

1. [Information on installation, adjusting, and parts can be found at:](http://www.demaeng.com/wp-content/uploads/parts/l872.pdf)
<http://www.demaeng.com/wp-content/uploads/parts/l872.pdf>

Approved:

Date: