



ANIMAL CARE SYSTEMS, INC.

Cage Washing Instructions

Product Support: Call Toll Free 1-888-827-3861

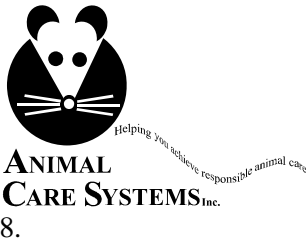
Overview

All M.I.C.E., OptiMICE, ErgoMICE, and OptiRAT System cages and cage parts are molded from either Bayer Makrolon® polycarbonate or Solvay Udel® polysulfone. As with any thermoplastic, cages and parts must be treated carefully to avoid premature failure. Extended exposure to sunlight or other forms of ultraviolet radiation are not recommended. Sterilization using ultraviolet radiation will shorten the lifespan of cages and void the warranty. Exposure to cleaning chemicals of all sorts should be limited to the minimum time necessary to achieve complete cleaning. Thoughtful care of Animal Care Systems, Inc. polycarbonate and polysulfone cages will extend their lifespan and allow years of troublefree service. Please note the specific washing instructions below for details and tips on caring for your M.I.C.E. System cages.

Hand Washing

Because washing cages and cage parts by hand is often a process that varies greatly depending on training, personnel, and adherence to guidelines, it is also the prime opportunity to damage cages with improper cleaning methods. Always follow the guidelines below to ensure cages are not damaged.

1. Leave the filters and filter components in place in the cage. Careful hand washing will not damage the filters.
2. Use only an acid detergent with a pH lower than 7.0. Alkaline detergents (pH>7.0) will attack the plastic cage parts in immersion and shorten the cage lifespan. If an alkaline detergent must be used, limit cage exposure time and ensure rinsing is very thorough.
3. Do not soak cages or cage parts for extended periods. Immersion time in hot detergent water should be minimized and never exceed 15 minutes maximum. Lengthy periods of soaking in hot detergent water can lead to stress cracking.
4. Hand washing water should not exceed a temperature of 135°-140° F. (57°-60° C.).
5. Clean filters by spraying with a hand-held sprayer from the inside of the cage towards the outside of the cage on the inlet filter, and from the outside towards the inside on the exhaust filter. This will ensure that filter debris is most effectively washed away from the surface of the filter.
6. Always rinse cages thoroughly prior to drying and/or autoclaving. All traces of detergent must be eliminated before further sterilization or use. In most cases, do not autoclave polycarbonate cages or cage parts.
7. Use softened water to avoid deposits of calcium on the cage surfaces.



8.

Machine Washing

A variety of automatic washing systems are available specifically for large batch processing of cages and cage parts. Animal Care Systems recommends that only equipment designed for cage washing is used. Ensure that plastic parts are racked properly to allow complete cleaning AND DRAINING when using large automatic cage washers.

1. The ideal wash water temperature should be 131° - 140° F. (55° - 60° C.). Higher temperature water up to 180° F. (82° C.) may be used for short periods for neutralizing and rinsing of cages.
2. The cage washer should not expose the cages to sudden changes in water temperature. Wash water should increase in temperature gradually to avoid exposing the cages to thermal shock.
3. Use acid (pH<7.0) detergent if possible. Acid detergents are useful in cleaning urine or hard water scaling.
4. If an alkaline detergent (pH>7.0) must be used for effective removal of organic residues in the cage, minimize the cage contact time, and thoroughly rinse with a short acid (pH<7.0) rinse cycle to neutralize the alkaline. Follow the acid rinse cycle with a fresh water rinse.
5. Spray nozzles should be located or aimed to give maximum effect on the cage filters to ensure that filter debris is effectively removed.
6. Use a water softener to reduce the effects of hard water on cages. Extended or frequent washing with hard water will result in a milky or grey discoloration of the cages and cage parts.
7. Avoid the use of any chemicals or rinse aids intended to reduce cage drying time.