



Leak Test for Poly Coated Hot Cups

EQUIPMENT

- Triton X-100
- Prepared Coffee
- Graduated Cylinder
- Gallon Container
- Appropriate Lids (Lids to fit cups being tested)
- Thermometer
- Magic Marker
- Gather eight (8) cups (which are consecutively produced) from the same cup machine.

PROCEDURE

1. Mark the bottom of the eight (8) cups as to what machine the samples were taken from.
2. Prepare Leak Test Solution:
 - A. Stock solution of wetting agent –
 1. Add 10 ml. Triton X-100 to 1,000 mol of water . . .OR
 2. Add 38 ml. Triton X-100 to one (1) gallon of water.
 3. Add 100 ml. of stock solution (Triton X-100 + water) to each gallon of brewed coffee.
 - B. Coffee –
 1. Any brand of coffee designated for brewing may be used.
 2. Follow manufacturer's instructions for brewing coffee.
3. Cups should be tested immediately after being produced.
4. Place the eight (8) poly-coated cups from the machine being tested, on the flat level surface covered with a paper table cloth. Fill the eight (8) cups to within ten-percent (10%) of the height of the container, with leak test solution.
5. The appropriate lids are then firmly placed on the cups being tested.
6. It is important that the leak test solution shall be 200° F minimum.
7. The leak test solution shall remain in the cups for twenty (20) minutes.
8. The cups are inspected periodically during those twenty (20) minutes for leakers. Note: These same sample cups can be used for stain ratings.
9. The results shall be expressed as the percent (%) occurrence of leakers for that particular cup machine.

Questions? Please send an email to fpfi@fpfi.org.

