

DEPARTMENT OF HEALTH AND HUMAN SERVICES PUBLIC HEALTH SERVICE FOOD AND DRUG ADMINISTRATION <b>MILK LABORATORY EVALUATION FORM</b>	LABORATORY	
	LOCATION	LAB #
	DATE	X = DEVIATION      U = UNDETERMINED O = NOT USED      NA = NOT APPLICABLE

**DISINTEGRATION METHOD FOR PAPER, PAPERBOARD  
OR MOLDED PULP MATERIALS**

[Unless otherwise stated all tolerances are ±5%]

- 1. Laboratory Requirements** .....
- a. Record time and date samples received .....
- b. Record time and date samples examined .....

**APPARATUS AND MATERIALS**

- 2. See Cultural Procedures, items 1-3, 10-21, 23-32 as appropriate** .....
- 3. Pipets, sterile** .....
- a. Capacity, 10 mL with 3 mm tip opening .....
- b. Or, 20 mL with large-bore tip opening .....
- 4. Pipet containers** .....
- a. Used for sterilization, storage, non-toxic .....
- 5. Scalpel or scissors, and forceps sterile** .....
- 6. Disintegrator blender** .....
- a. Sterile, high speed, electrically operated, corrosion-resistant cup .....
- b. Capacity, 500 mL; optionally, 1000 mL .....
- 7. 70% ethyl alcohol** .....
- a. In a covered container to hold scalpels, scissors and forceps .....
- 8. Dilution buffer (Cultural Procedures, item 25a,c)** .....
- a. In containers filled to contain 300±6 mL (or 500±10 mL) .....
- 9. Sterile kraft paper or envelopes** .....

**PROCEDURE**

- 10. Not applicable when wax, plastic or metal is food contact surface** .....
- 11. Use sterile cutting device, cut 100g from butt roll and transfer to sterile wrapper or envelope** .....
- 12. With sterile cutting device, trim off 5 cm of the outer edge of the sample sheet** .....
- 13. Handling with sterile forceps, cut into 0.5 cm pieces 3g of the center portion into a sterile petri dish** .....

- 14. Transfer this 3g into a sterile disintegrator cup containing 300 mL dilution water (5g in 500 mL)** .....
- 15. Place cup on blender motor, run at high-speed 30 sec, check to insure no particles are on side of cup or trapped beneath blade** .....
- 16. Continue high speed blending for a total of 2 min, depending on paper type, checking at intervals for particles on side of cup** .....
- 17. Take great precautions to avoid dust, moisture, and other contaminants at all steps** .....

**PLATING**

- 18. With sterile pipet, divide 10 mL of disintegrated sample equally among 3 plates (optionally use 5 plates)** .....
- 19. Pour agar (see SPC, item 13), thoroughly and evenly mix with test portion in plate** .....

**CONTROLS**

- 20. See SPC, item 14** .....

**INCUBATION**

- 21. See SPC, item 15** .....
- a. Incubate at 32±1C for 48±3 hr .....

**COUNTING COLONIES**

- 22. See SPC, items 16, 17**

**REPORTS**

- 23. Computing and Reporting Counts** .....
- a. Multiply the sum of the colonies on 3 (5) plates by 10 .....
- b. Report as the number of colonies/g of stock .....