

Chapter Ag 105

MILK AND CREAM TEST BOTTLES

Ag 105.01	Babcock test glassware	Ag 105.03	Cream test bottles
Ag 105.02	Milk test bottles	Ag 105.04	Standard milk pipettes

Ag 105.01 Babcock test glassware. Bottles and pipettes used in determining the per cent of fat in milk or milk products shall have the word "sealed" clearly blown or otherwise clearly and permanently marked in or on the side of the bottle or pipette, and in or on the side or bottom of the bottle or pipette, the name, initials, or trademark of the manufacturer and designating number.

Ag 105.02 Milk test bottles. The standard Babcock test bottles for milk shall have a capacity of 1.6 cubic centimeters for each 8 per cent marked upon the necks thereof.

(1) **GRADUATION.** The total per cent graduation shall be 8. The graduated portion of the neck shall have a length not less than 63.5 millimeters (2.5 inches). The graduation shall represent 1%, 0.5%, and 0.1%. The 0.1% graduations shall be not less than 3 millimeters in length; the 0.5% graduations shall be one millimeter longer than the 0.1% graduations, projecting one millimeter to the left; the 1% graduations shall extend halfway around the neck to the right, projecting 2 millimeters to the left of the 0.1% graduations. Each per cent graduation shall be numbered, the number being placed on the left of the scale. The maximum error of the total graduation or any part thereof shall not exceed the volume of the smallest unit of the graduation.

(2) **NECK.** The neck shall be cylindrical for at least 5 millimeters below the lowest and above the highest graduation marks. The top of the neck shall be flared to a diameter of not less than 10 millimeters.

(3) **BULB.** The capacity of the bulb up to the junction of the neck shall be not less than 45 milliliters. The shape of the bulb may be either cylindrical or conical, with the smallest diameter at the bottom. If cylindrical, the outside diameter shall be between 34 and 36 millimeters; if conical, the outside diameter of the base shall be between 31 and 33 millimeters and the maximum diameter between 35 and 37 millimeters.

(4) **CHARGE.** The charge of the bottle shall be 18 grams.

(5) **HEIGHT.** The total height of the bottle shall be between 150 and 165 millimeters (5¾ and 6½ inches).

Ag 105.03 Cream test bottles. (1) **CHARGE.** Cream test bottles shall receive a charge of either 9 grams or 18 grams. The 18-gram bottle shall be used with only an 18-gram charge and the 9-gram bottle shall be used with a 9-gram charge. Each bottle shall bear on the top of the neck above the graduations in plainly legible characters the weight of the charge to be used.