## Safety Butyrometer





#### **Advantages:**

- Safety (unbreakable)
  - Simple and fast cleaning/drying
    - Precision
      - Simple and precise read off
        - Simple handling
          - Inexpensive

#### **Two Mode Function:**

- 1. Centrifugation Mode
- 2. Read Off Mode

#### **Dimensions:**

Length: 210mm Diameter: 25mm Weight: 14,2 g

Material: Polypropylene

Art. No.	Ordering Data/Name
3155-PP	Safety-Butyrometer for Milk 0-9%:0,1, with 2 Screw-Bulbs, PP, 10 Pcs/Bag
3229-PP	Safety-Butyrometer für Cheese 0-30%:0,5, with 2 Screw-Bulbs, PP, Pcs/Bag
3263	Stabilizer from stainless Steel for Safety-Butyrometer
3343	Weighing Stand for Safety-Butyrometer

% 9

6

5

3

2

1

₫ 0

Scale

# **FUNCE**GERBER

**Butyrometric Determination** of Fat Content with the

### Safety Butyrometer

Two Mode Function: Centrifugation Mode and Read Off Mode

#### 1. Adding Sulphuric Acid

- 1.1. Ensure the Bulb Screw is closed tightly.
- **1.2.** Place the Butyrometer in the stand with Bulb facing downwards.
- **1.3.** Pour 10 ml of sulphuric acid in the body.
- **1.4.** Gently tap the Butyrometer on the stand in order to allow a small part of the acid to flow into the scale and the Bulb.

#### 2. Pipetting the milk

- **2.1.** Carefully turn the bottle with the milk specimen upside down three or four times.
- **2.2.** Then immediately pipette 10.75 ml of milk into the Butyrometer. (Laying the milk carefully on top of the acid)

#### 3. Adding Amyl Alcohol

3.1. Add 1 ml of amyl alcohol onto the milk.

#### 4. Locking the Butyrometer

- 4.1. Tighten the Body Screw carefully.

  Important: turn the screw up to the stop! (Centrifugation-Mode).
- **4.2.** Press the stabilizer on the Body Screw.

#### 5. Shaking the Butyrometer

5.1. Shake the Butyrometer vigorously until the liquids are thoroughly mixed.

Note: When the liquids are mixed, a considerable amount of heat is given off.

#### 6. Centrifugation

- 6.1. Immediately after the mixture has been shaken and turned upside down a few times, the Butyrometers (at least 2 Butyrometers in order to avoid unbalances) still hot and with bulb pointing upwards, are placed in buckets inside the heated **FUNKE-GERBER** centrifuge.
- **6.2.** Centrifuge settings: Time: 5 minutes
  Centrifugal force: 350 g +/- 50 g Temperature: <60°C
- **6.3.** Start Centrifuge.

#### 7. . Warming up

7.1. After centrifugation remove the Butyrometers from the centrifuge, taking care not to tilt them. Place the Butyrometers with bulb pointing upwards for 5 minutes in a water bath, which is heated to a temperature of 65°C +/- 2 K.

The stabilizer can be removed before.

#### 8. Read out measurement results

- **8.1.** After removing the butyrometer from the water bath, hold it vertically at the height where the meniscus of the column of fat is at eye level.
- **8.2.** By using the screw below you can adjust on zero the demarcation line between the residual mixture and the fat column and read out at the lowest point of the meniscus. (Read Off Mode).



Stabilizer (Stainless Steel)



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