

IS 1223 : 2001 Apparatus for determination of milk fat by gerber method - Specification (Third Revision)

Fat content determination is of great importance in milk and its products because:

- This parameter impacts the price of the product.
- It helps to determine whether the sample of milk or milk product complies with limits specified in Standard or not.
- Fat estimation in milk is necessary to classify/segregate the milk for the preparation of various milk products.

Two typical methods for determining the content of fat in milk and its products are:

- Mojonnier method (Reference method)
- Gerber method (Routine method)

The method of test for estimating fat content in milk and milk products by Gerber Method is prescribed in IS 1224 (Part 1) & IS 1224 (Part 2), respectively.

Whereas in the IS 1223, as the title indicates, the detailed specification has been given for the each apparatus used in estimation of fat in milk & its products by Gerber method.

In the standard, there are 8 sections, each dedicated to a specific apparatus, wherein constructional requirement for each apparatus is given. Constructional requirement of an apparatus includes material of construction; its shape & design; capacity, scale of measurement & tolerances; dimensions; graduation marks and their numbering; volume of solution delivered and delivery time; temperature & safety requirement, etc.

IS 1223 comprises the following Sections:

- a) Section 1 Butyrometers
- b) Section 2 Stoppers
- c) Section 3 Pipettes
- d) Section 4 Automatic Measures
- e) Section 5 Tilt Measures
- t) Section 6 Centrifuges
- g) Section 7 Water-Bath
- h) Section 8 General

The different types of apparatus have also been specified in sections, wherever applicable. Like, Milk and its derivatives like cheese, butter, cream and other milk products have different fat content. So, in Section 1 different types of Butyrometers has been specified for different products depending on their fat content to be determined. The scale of measurement is different in each type of Butyrometers.

Whereas, Section 3 specifies the different types of pipettes to be used for dispensing milk and amyl alcohol.