IS : 8479 (Part I) – 1987

Indian Standard
METHOD FOR DETERMINATION OF PHOSPHATASE ACTIVITY IN MILK AND MILK PRODUCTS

PART I ROUTINE METHOD

0. FOREWORD

0.1 This Indian Standard (Part I) was adopted by the Indian Standards Institution on 30 May 1977, after the draft finalized by the Dairy Products Sectional Committee had been approved by the Agricultural and Food Products Division Council.

0.2 Phosphatase activity is determined to judge the efficiency of pasteurization of milk and milk products. To test whether the prescribed heat treatment was properly carried out, the treated milk or milk products is subject-ed to phosphatase test which helps to indicate the presence or absence of phosphatase enzyme. Phosphatase present in milk or milk products is destroyed by just about the same heat treatment necessary for the destruction of *Mycobacterium tuberculosis,* the most heat-resistant pathogen likely to bc present m the products. The method is, therefore, applied for the control of proper pasteurization.

0.3 This standard is being issued in two parts. This part (Part I) covers the routine method for the determination of phosphatase activity which is carried out with special discs and a comparator and is used for day-to-day checks for the control of proper pasteurizations of milk and milk products in a dairy. Part II covers the reference method which requires the use of a spectrophotometer and is usually applied in casts of dispute.

0.4 In the preparation of this standard, considerable assistance has been derived from various documents on the subject prepared by the International Organization for Standardization.

0.5 In rep0rtin.g the result of a test or analysis made in accordance with this standard, If the final value, observed or calculated, is to be rounded off, it shall be done in accordance with IS : 2-1960*.

1. SCOPE

1.1 This standard (Part I) specifies a routine method for the determination of the phosphatase activity in milk and milk powder; buttermilk and butter milkpowder; and whey and whey powder.