

**AMENDMENT NO. 01 TO SLS 824 : 1989  
SPECIFICATION FOR FERMENTED MILK PRODUCTS, PART 2 : YOGHURT**

**EXPLANATORY NOTE**

Comments were received from the SLSI laboratory regarding the test method for the determination of milk solids not fat (MSNF). In the SLS 824 : 1989, Part 2, total solids and fat content are determined separately. MSNF present is calculated by subtracting the fat content from the total solids content.

Further more, in the manufacturing process of yoghurt sugar is added as an ingredient. Therefore in the calculation of MSNF sugar content also included, and causes a error in the final figure.

Therefore a new method has been suggested by the SLSI laboratory which was based on the method given in SLS 223 : 1989 Specification for Ice Cream (First revision) Appendix C. A yoghurt sample was tested at SLSI Laboratory in accordance with the above test method. This trial testing indicated that the method proposed was satisfactory.

**AMENDMENT NO. 01 APPROVED ON 1995-08-24 TO SLS 824 : 1989  
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**Clause 2**

Delete "Part 5 : Determination of total solids"

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**TABLE 1**

SL. No. ii), column 6 delete "SLS 753 : Part 1 and SLS 735 : Part 5" and substitute "Appendix C".

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**Clause 9 Methods of test**

Reword the text as follows "Tests shall be carried out as prescribed in SLS 735, Appendix A and Appendix C of this specification".

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Include the following text as Appendix C.

**APPENDIX C  
DETERMINATION OF MILK SOLIDS NON FAT**

**C.1 INTRODUCTION**

The amount of milk solids other than fat (MSNF) can be calculated approximately from individual constituents such as the protein, casein, calcium and lactose. The subtraction from the constituent when present from other sources (eg – calcium alginate, added lactose is however usually difficult to assess.

This method employs the formal titration which is one of the simplest for assessing MSNF content. It has been shown that the result obtained is not affected by the presence of wheat flour and gelatine in the product.

## C.2 REAGENTS

C.2.1 Phenolphthalein indicator solution

C.2.2 Sodium hydroxide,  $C(\text{NaOH}) = 0.100 \text{ mol/l}$

C.2.3 Formaldehyde, 40 per cent (V/V)

## C.3 PROCEDURE

C.3.1 Weigh, to the nearest milligram, about 10 g of the prepared sample into a porcelain dish. Add 1 ml of phenolphthalein (C.2.1) and titrate with sodium hydroxide (C.2.2) until a faint pink colour is obtained.

Add 3.00 ml of formaldehyde solution (C.2.3) to the neutralized yogurt, mix with a glass rod and titrate with the sodium hydroxide using phenolphthalein as the indicator ( $V_1$ ).

C.3.2 Carry out a blank titration, by titrating 3.00 ml of formaldehyde solution (C.2.3) to neutrality ( $V_2$ ).

## C.4 CALCULATION

Milk solids non fat per cent by mass =  $5.67 (V_1 - V_2)$

Where,

$V_1$  is the volume, in ml, of the sodium hydroxide solution used in C.3.1; and

$V_2$  is the volume, in ml, of the sodium hydroxide solution used in C.3.2.