

ISO 12078:2006-02 (E)

Anhydrous milk fat - Determination of sterol composition by gas liquid chromatography (Reference method)

Contents		Page
Foreword		iv
Foreword		v
1	Scope	1
2	Normative references	1
3	Terms and definitions	1
4	Principle	2
5	Reagents	2
6	Apparatus	3
7	Sampling	6
8	Preparation of test sample	6
9	Procedure	6
9.1	Sterol standard solutions	6
9.1.1	Calibrating solution for the determination of cholesterol response factor	6
9.1.2	Qualitative solution for the determination of sterol retention time	6
9.2	Test portion	6
9.3	Saponification	7
9.4	Extraction of the unsaponifiable matter	7
9.5	Thin-layer chromatography (TLC)	7
9.5.1	Preparation of TLC plates	7
9.5.2	Preparation of glass plate-developing tank	7
9.5.3	TLC of unsaponifiable matter	7
9.6	Preparation of silyl derivatives	8
9.7	Qualitative analysis	8
9.8	Quantitative analysis	8
9.8.1	Calculation of response factor	8
9.8.2	Determination of the test portion	9
9.8.3	Calculation and expression of results	9
10	Precision	10
10.1	Interlaboratory test	10
10.2	Repeatability	10
10.3	Reproducibility	10
11	Test report	11
Annex A (informative) Examples of the gas-liquid chromatographic analysis		12
Annex B (informative) Results of an interlaboratory test		14
Bibliography		16