STANDARDS AUSTRALIA

RECONFIRMATION

OF

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Methods of chemical and physical testing for dairying industry

Method 4.6: Dried milk and dried milk products—Determination of dispersibility

and wettability of instant dried milk

RECONFIRMATION NOTICE

Technical Committee FT-024 has reviewed the content of this publication and in accordance with Standards Australia procedures for reconfirmation, it has been determined that the publication is still valid and does not require change.

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Approved for reconfirmation in accordance with Standards Australia procedures for reconfirmation on 22 November 2016.

The following are represented on Technical Committee FT-024:

Australian Chamber of Commerce and Industry Australian Institute of Food Science and Technology Meat and Livestock Australia National Association of Testing Authorities Australia National Measurement Institute

Methods of chemical and physical testing for the dairying industry

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Method 4.6: Dried milk and dried milk products—Determination of dispersibility and wettability of instant dried milk

PREFACE

This Standard was prepared by the Standards Australia Committee on Chemical Analysis of Dairy Products. It is based on International Dairy Federation Standard IDF 87, Determination of the dispersibility and wettability of instant dried milk.

FOREWORD

The degree to which a dried milk is 'instant', i.e. its ability to reconstitute almost immediately to the liquid product when added to water, depends on various properties such as wettability (wetting time), solubility and dispersibility. The first two of these properties affect the third, and hence dispersibility, as defined and determined in this Standard, is probably the best single criterion for assessing the overall 'instant' characteristics of a dried milk.

NOTE: The International Dairy Federation has provisionally recommended that an instant dried milk should be regarded as failing to possess sufficient 'instant' characteristics if its dispersibility (mean of duplicate single values) when determined in accordance with IDF 87, is less than 90% for dried skimmed milk or less than 85% for dried whole milk.

Wettability (wetting time) as defined and determined in this Standard, has been found to have an approximate inverse relationship to dispersibility but this relationship is different for instant dried skimmed milks manufactured by different processes and for instant dried whole milk. These relationships are approximate because wettability is difficult to measure accurately and other properties may have a significant effect on either wetting time or dispersibility. However, the determination of wettability, which can be made rapidly, provides a useful indication of the degree to which a dried milk possesses 'instant' characteristics. A manufacturer may therefore accumulate comparative values of wettability and dispersibility which provide a useful guide to whether the wettability of an instant dried milk indicates that the product will have acceptable 'instant' characteristics.

METHOD

1 SCOPE This Standard sets out a method for determining the dispersibility in water of instant dried milk and a rapid method for determining the wettability in water of instant dried milk.

The methods apply to instant dried skimmed milk and to instant dried whole milk.