

Australian Standard™

**Iodophors for use in the
dairying industry**

This Australian Standard was prepared by Committee FT/9, Dairy Detergents and Sanitizers. It was approved on behalf of the Council of Standards Australia on 17 April 1998 and published on 5 July 1998.

The following interests are represented on Committee FT/9:

Australian Chamber of Commerce and Industry
Australian Chemical Specialties Manufacturers Association
Australian Dairy Farmers Federation
Dairy Industry Association of Australia
Dairy Industry Authority of Western Australia
Department of Primary Industries, Queensland
Detergent & Sanitizers Manufacturers Co-op Group, New Zealand
Food Technology Association of Victoria
Ministry of Agriculture & Fisheries New Zealand
National Registration Authority
N.S.W. Dairy Corporation
Victorian Dairy Industry Authority

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**Iodophors for use in the
dairying industry**

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Third edition 1998.

PREFACE

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee FT/9, Dairy Detergents and Sanitizers, to supersede AS 1398—1982.

This Standard is the result of a consensus among Australian and New Zealand representatives on the Joint Committee to produce it as an Australian Standard.

The objective of this revision is to maintain the established Standard and to introduce some minor changes.

This Standard is one of a number of Standards dealing with dairy detergents and sanitizers. These Standards include AS 2541—1982, *Guide to the cleaning-in-place of dairy factory equipment*, AS 1162—1991, *Cleaning and sanitizing dairy factory equipment* and AS 1536—1991, *Cleaning and sanitizing milking equipment*, which should be consulted in relation to the proper usage of the detergents and sanitizers specified in the product specifications.

As a low pH is an essential condition for the sanitizing action of an acidophor (see Clause 7), it is most important that suitable control be exercised over the alkalinity of the make-up water used. It also follows that the 'significant surfaces' of the equipment being treated should be resistant to the action of acid. The Committee recognized that corrosion problems could be accentuated by the use of mineral acids in the acidophor formulations. Accordingly, the Standard includes a corrosion test designed to limit the amount of strong acid that can be incorporated.

The method given in Appendix E for the assessment of bactericidal properties was developed at the Dairy Research Centre, N.S.W., and is based closely on the International Dairy Federation's Standard 18:1962, *Capacity Test for the Evaluation of the Disinfectant Activity of Dairy Disinfectants*.

The term 'normative' has been used in this Standard to define the application of the appendix to which it applies. A 'normative' appendix is an integral part of a Standard.

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STANDARDS AUSTRALIA

Australian Standard

Iodophors for use in the dairying industry

1 SCOPE This Standard specifies requirements for products based on iodine, known as 'iodophors', which can be used, when appropriately diluted, for the sanitizing of dairy equipment on the farm and/or in the factory.

2 REFERENCED DOCUMENTS The following documents are referred to in this Standard:

AS

1162 Cleaning and sanitizing dairy factory equipment

1449 Wrought alloy steels—Stainless and heat-resisting steel plate, sheet and strip

1536 Cleaning and sanitizing milking equipment

2163 Laboratory glassware—Measuring cylinders

2164 Laboratory glassware—One-mark volumetric flasks

BS

2648 Performance requirements for electrically-heated laboratory drying ovens

EN ISO 3696 Water for analytical laboratory use—Specification and test methods

3 DEFINITIONS For the purpose of this Standard, the definitions below apply.

3.1 Use dilution—the minimum concentration of iodophor in water that the manufacturer has recommended for a specified application.

3.2 Use temperature—the temperature that the supplier/manufacturer has recommended for a specific application. Cold is between 1°C and 35°C, warm between 36°C and 59°C, and hot is 60°C and above.

4 GENERAL PROPERTIES The following criteria shall apply to iodophors:

- (a) The product as received shall be homogeneous.
- (b) The substance shall be either liquid or solid. If liquid, it shall be mobile, dark brown, free from sediment, and shall have a characteristic non-irritating odour.
- (c) Powdered substances shall be homogeneously blended and free flowing. Any caking that occurs during normal storage in sealed containers shall be easily broken up so that the material again becomes free flowing.
- (d) The substance shall not contain any perfume or fragrant deodorizer.
- (e) When used in accordance with the manufacturer's/supplier's instructions the substance shall not impart any flavour or taint to dairy products.
- (f) The substance shall be free from foreign matter.
- (g) When used in accordance with the manufacturer's/supplier's instructions the substance shall not cause any residues harmful to humans or to the quality of dairy products.
- (h) The stability of the substance shall be sufficient for it to meet all appropriate performance or tests in its specification up to at least 2 years after the date of manufacture.