

Australian Standard[®]

**METHODS OF TEST FOR TEAT
SKIN DISINFECTANTS**

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Agricultural & Veterinary Chemicals Association of Australia
Australian Chemical Specialties Manufacturers Association
Australian Dairy Farmers Federation
Australian Veterinary Association
CSIRO, Division of Animal Health
Department of Agriculture, N.S.W.
Department of Agriculture, S.A.
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PREFACE

This Standard was prepared by the Association's Committee on Testing Teat Skin Disinfectants at the direction of the Food Technology Standards Board of the Standards Association of Australia.

The Food Technology Standards Board considers that teat skin disinfectants which are used to assist in the control of mastitis should be effective for that purpose and should not harm the cows treated with them, and should not impart any residue to milk. Standard methods of test are required to demonstrate these properties although it is acknowledged that a product need not necessarily be submitted to the tests described in this Standard if alternative evidence is available which a Regulatory Authority accepts as satisfactory for approval and registration.

In the preparation of these methods, the Committee took account of the work carried out by the National Mastitis Council in the United States of America and by the International Dairy Federation.

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STANDARDS ASSOCIATION OF AUSTRALIA

Australian Standard

METHODS OF TEST FOR TEAT SKIN DISINFECTANTS

SECTION 1. SCOPE AND GENERAL

1.1 SCOPE. This Standard sets out a series of tests to assess those characteristics of teat skin disinfectants which determine that they are efficacious and are not harmful to the treated animals.

The characteristics considered are listed and described in Clause 1.4.

1.2 APPLICATION. The procedures are intended for assessment of teat skin disinfectants which are used for control of mastitis in cows. Tests described provide evidence that a product will not cause harm to cows and that it is effective in aiding the control of mastitis. One of the tests also provides data on the levels of contamination of the milk by the teat skin disinfectant but toxicological implications resulting from such contamination are not discussed.

1.3 DEFINITION. For the purpose of this Standard, the following definition applies:

Teat skin disinfectant—a preparation which is applied to the skin of the teats of a cow in order to control mastitis.

1.4 CHARACTERISTICS TO BE ASSESSED.

1.4.1 Irritancy to teat skin. A screening procedure to establish that a product is neither harmful nor irritant to the bovine teat or udder is set out in Section 2.

1.4.2 Residues in milk. Guidelines for determining residues in milk resulting from the use of teat skin disinfectants are set out in Section 3.

1.4.3 Bactericidal efficacy. A challenge test for bactericidal efficacy is set out in Section 4.

NOTE: Satisfactory performance in this test does not necessarily indicate that the product is effective in controlling mastitis under field conditions.

1.4.4 Control of mastitis. Two alternative procedures involving long term experimental field trials on dairy herds, for determining the efficacy of teat skin disinfectants in controlling mastitis are set out in Sections 5 and 6.

The method described in Section 5 is for determining the efficacy of a teat skin disinfectant in reducing the natural occurrence of new intramammary infections in cows.

The method described in Section 6 requires a shorter time than that in Section 5 and is for determining the efficacy of a teat skin disinfectant in reducing the occurrence of new intramammary infections during a period of experimental exposure of the teats to *Staphylococcus aureus*.

1.5 SUPERVISION OF THE TESTS. Tests described in this Standard shall be carried out under the supervision of a registered veterinary surgeon to ensure correct diagnosis of the test animals' condition and so that immediate remedial action can be instituted if mastitis occurs during the tests.