

AS 2396—1980

Australian Standard[®]

**PERFORMANCE OF HOUSEHOLD
FOOD WASTE DISPOSAL UNITS**

[Title allocated by Defence Cataloguing Authority:
Food Waste Disposal Machine, Household]

The following scientific, industrial, governmental and consumer organizations and departments were officially represented on the committee entrusted with the preparation of this standard:

Australian Electrical and Electronics Manufacturers Association
Australian Consumers Association
Australian Federation of Consumer Organizations
Confederation of Australian Industry
Department of Housing and Construction
Department of Consumer Affairs, N.S.W.
Electrical Contractors Association of Australia
Electricity Supply Association of Australia
Housing Commission of N.S.W.
Health Commission of N.S.W.
Metropolitan Water Sewerage and Drainage Board, Sydney
Melbourne and Metropolitan Board of Works
The Engineering and Water Supply Department, South Australia

This standard, prepared by Committee EL/5, Quality and Performance of Household Electrical Appliances, was approved on behalf of the Council of the Standards Association of Australia on 5 August 1980, and published on 1 November 1980.

Review of Australian Standards. To keep abreast of progress in industry, Australian Standards are subject to periodic review and are kept up to date by the issue of amendments or new editions as necessary. It is important that Standards users ensure that they are in possession of the latest edition, and any amendments thereto.

Full details of all Australian Standards and related publications will be found in the Standards Australia Catalogue of Publications; this information is supplemented each month by the magazine 'The Australian Standard', which subscribing members receive, and which gives details of new publications, new editions and amendments, and of withdrawn Standards.

Suggestions for improvements to Australian Standards, addressed to the head office of Standards Australia, are welcomed. Notification of any inaccuracy or ambiguity found in an Australian Standard should be made without delay in order that the matter may be investigated and appropriate action taken.

Australian Standard®

**PERFORMANCE OF HOUSEHOLD
FOOD WASTE DISPOSAL UNITS**

First published 1980

PREFACE

This standard was prepared by the Association's Committee on Quality and Performance of Household Electrical Appliances. It applies only to food waste disposal units intended for installation in household premises.

In the preparation of the standard, consideration was given to American National Standards A197.4, Performance Evaluation Procedure for Household Food Waste Disposers, and A197.3, Plumbing Requirements for Household Food Waste Disposer Units, and acknowledgment is made of the assistance received therefrom. Consideration was also given to the plumbing requirements set by the various State statutory authorities.

In the application of this standard reference may be necessary to the following Australian standards.

AS 1152	Test Sieves
AS 1415	Unplasticized PVC (UPVC) Pipes and Fittings for Soil, Waste and Vent (SWV) Applications Part 1 – Pipes
AS 1449	Wrought Alloy Steels – Stainless and Heat-resisting Steel Plate, Sheet and Strip
AS 1722	Pipe Threads of Whitworth Form Part 1 – Sealing Pipe Threads
AS 1756	Stainless Steel Sinks (With and Without Drainers)
AS 2202	Code of Practice for the Provision of Warranties / Guarantees for Household Goods
AS 3115	Approval and Test Specification for Motor-operated Appliances
AS A162	Plastics Waste Traps*

* In course of revision.

© Copyright — STANDARDS AUSTRALIA

Users of Standards are reminded that copyright subsists in all Standards Australia publications and software. Except where the Copyright Act allows and except where provided for below no publications or software produced by Standards Australia may be reproduced, stored in a retrieval system in any form or transmitted by any means without prior permission in writing from Standards Australia. Permission may be conditional on an appropriate royalty payment. Requests for permission and information on commercial software royalties should be directed to the head office of Standards Australia.

Standards Australia will permit up to 10 percent of the technical content pages of a Standard to be copied for use exclusively in-house by purchasers of the Standard without payment of a royalty or advice to Standards Australia.

Standards Australia will also permit the inclusion of its copyright material in computer software programs for no royalty payment provided such programs are used exclusively in-house by the creators of the programs.

Care should be taken to ensure that material used is from the current edition of the Standard and that it is updated whenever the Standard is amended or revised. The number and date of the Standard should therefore be clearly identified.

The use of material in print form or in computer software programs to be used commercially, with or without payment, or in commercial contracts is subject to the payment of a royalty. This policy may be varied by Standards Australia at any time.

CONTENTS

	<i>Page</i>
SECTION 1. SCOPE AND GENERAL	
1.1 Scope	4
1.2 Object	4
1.3 Electrical Safety Requirements	4
1.4 Requirements of Statutory Authorities	4
1.5 Definitions	4
SECTION 2. DESIGN, CONSTRUCTION AND PLUMBING REQUIREMENTS	
2.1 General	5
2.2 Safety of Operation	5
2.3 Starting and Impact Torque	5
2.4 Mounting of Sink	5
2.5 Connection of Sink	5
2.6 Flushing and Self-scouring	5
2.7 Clearance of Jamming	5
2.8 Noise	5
2.9 Plumbing Requirements	5
2.10 Ejection of Food Waste Through Feed Opening	5
SECTION 3. PERFORMANCE REQUIREMENTS	
3.1 General	7
3.2 Degree of Fineness	7
3.3 Grinding Rate	7
3.4 Freedom from Jamming	7
3.5 Resistance to Damage	7
3.6 Drainage	7
3.7 Backflow into Dishwasher	7
SECTION 4. MARKINGS AND OTHER INFORMATION	
4.1 Markings	8
4.2 Guarantee	8
4.3 Installation Instructions	8
4.4 Operationing Instructions	8
4.5 Source Replacement Parts	8
SECTION 5. GENERAL REQUIREMENTS FOR TESTS	
5.1 Tests to be Made	9
5.2 General Conditions for Tests	9
5.3 Preparation of Beef Rib Bones	9
SECTION 6. TESTS	
6.1 Fineness Test	10
6.2 Grinding Rate Test	10
6.3 Jamming Test	13
6.4 Damage Resistance Test	14
6.5 Free-flowing Drainage Test	14
6.6 Backflow into Dishwasher Test	14
APPENDIX A. RECOMMENDATIONS FOR INSTALLATION OF DISPOSAL UNITS TO MINIMIZE NOISE EMISSION	15

STANDARDS ASSOCIATION OF AUSTRALIA

Australian Standard

for

PERFORMANCE OF HOUSEHOLD FOOD WASTE DISPOSAL UNITS

SECTION 1. SCOPE AND GENERAL

1.1 SCOPE. This standard specifies requirements for food waste disposal units for household use, intended to be permanently fitted in the outlet of a sink and in which the food waste is shredded by mechanical action into pieces and flushed down a household drain. It applies only to those units intended to be connected to a single-phase a.c. supply at voltages not exceeding 250 V.

NOTE: Food waste includes all perishable food waste but does not include packaging materials such as cans and bottles.

1.2 OBJECT. The object of this standard is -

- to state and define the principal performance characteristics of household food waste disposal units;
- to describe the standard methods for measuring these characteristics;
- to specify performance levels for these characteristics; and
- to specify any other requirements which will ensure that a household food waste disposal unit will be a satisfactory appliance.

1.3 ELECTRICAL SAFETY REQUIREMENTS. This standard does not include the electrical safety requirements which must be observed to secure approval for connection or sale of food waste disposal units. A food waste disposal unit shall, in addition to complying with this standard, comply with the requirements of AS 3115.

1.4 REQUIREMENTS OF STATUTORY AUTHORITIES. Attention is drawn to any special requirements of the statutory bodies controlling approvals for water and sewerage.

1.5 DEFINITIONS. For the purposes of this standard, the following definitions apply.

1.5.1 Food waste disposal unit - an electrical appliance in which food waste is shredded into pieces small enough to be flushed into the household plumbing drainage system (hereinafter called 'disposal unit').

1.5.2 Continuous feed disposal unit - a disposal unit in which the food waste can be fed into the hopper while the grinder is in operation.

1.5.3 Batch feed disposal unit - a disposal unit, so interlocked that the food waste can be fed into the hopper only when the grinder is not in operation.

1.5.4 Grinding chamber (hopper) - the space or cavity within the disposal unit which receives and contains food waste prior to and during the shredding process.

1.5.5 Grind or shredding ring - a stationary circular ring with projections, which is located in the lower area of the grinding chamber and against which the food waste is shredded or pulverised by abrasive or grinding operation.

1.5.6 Grind or shredder plate - a rotating plate at the bottom of the grinding chamber which impels food waste by centrifugal force against the side walls of the grind ring.

1.5.7 Splash guard - a device, made of flexible material, placed at the opening of a continuous feed disposal unit and designed to prevent the ejection of waste from the opening.

1.5.8 Dishwasher discharge connection - an opening to permit the discharge from a household electric dishwasher to be drained into the disposal unit.

1.5.9 Waste outlet - an outlet through which the waste material is discharged.

1.5.10 Sink flange - the flange which connects the unit to the sink.

1.5.11 Starting jam - a jam that inhibits the operation of the disposal unit from the initial application of power.

1.5.12 Running jam - a jam that occurs whilst the disposal unit is operating and which inhibits further operation.

1.5.13 Tape tests - tests required to be made by the manufacturer to demonstrate that the performance of a disposal unit will meet the requirements of this standard. These tests are of such a nature that, after they have been made, they need not be repeated, unless changes are made in the disposal unit materials or design which might change the performance characteristics.