AS 1251, Part 1—1980
UDC 628.443:678.742.2

Australian Standard 1251, Part 1—1980

POLYETHYLENE (POLYTHENE) GARBAGE BAGS

Part 1—LOW DENSITY

STANDARDS ASSOCIATION OF AUSTRALIA
Incorporated by Royal Charter

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THE FOLLOWING SCIENTIFIC, INDUSTRIAL AND GOVERNMENTAL ORGANIZATIONS and departments were officially represented on the committee entrusted with the preparation of this standard:

Confederation of Australian Industry

Department of Local Government, Victoria

Health Commission of New South Wales

Melbourne City Council

Plastics Institute of Australia Incorporated

This standard, prepared by Committee PL/33, Plastics Garbage Bags, was approved by the Plastics Standards Board on behalf of the Council of the Standards Association of Australia on 7 January 1980, and was published on 1 March 1980.

AUSTRALIAN STANDARD

POLYETHYLENE (POLYTHENE) GARBAGE BAGS

Part 1 LOW DENSITY

AS 1251, Part 1—1980

First issued (as AS 1251)..... 1972
Revised (Part 1) 1980

PUBLISHED BY THE STANDARDS ASSOCIATION OF AUSTRALIA,
STANDARDS HOUSE, 80 ARTHUR ST, NORTH SYDNEY, N.S.W.

ISBN 0 7262 1868 5

PREFACE

This revision of AS 1251—1972 was prepared by the Association's Committee on Plastics Garbage Bags under the direction of the Plastics Standards Board.

Only requirements for low density polyethylene (up to 940 kg/m³) garbage bags for collection both from dwellings and from commercial premises are included in this standard. These requirements are intended to exclude the many undesirable types of bag currently presented, full of garbage, for collection by local government authorities.

Garbage bags manufactured from high density polyethylene film (density greater than 940 kg/m³) will be specified in Part 2 of this standard.

This standard may require reference to the following standards:

AS 2103 Dial Gauges and Dial Test Indicators

AS B83 Gauge Blocks and their Accessories

ASTM D1003 Haze and Luminous Transmittance of Transparent Plastics

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STANDARDS ASSOCIATION OF AUSTRALIA

Australian Standard
for
POLYETHYLENE (POLYTHENE) GARBAGE BAGS

PART 1—LOW DENSITY

1 SCOPE. This standard specifies requirements for garbage bags for domestic and commercial use, produced from low density polyethylene film having a density* not greater than 940 kg/m³ and intended for collection without a supporting bin.

2 DEFINITIONS. For the purpose of this standard, the following definitions apply:

Domestic bag—a bag designed for the retention of garbage by individual householders, pending its disposal.

Commercial bag—a bag designed for the retention of garbage by the catering trade (restaurants, cafes, hotels, etc), business houses and retail shops, pending its disposal.

3 REQUIREMENTS FOR DOMESTIC BAG.

3.1 Film Dimensions and Properties.

3.1.1 *Film thickness.*

(a) *Film for bags up to 950 mm × 680 mm.* When determined in accordance with Appendix A, the average thickness of film, or film in the form of bags, shall be a minimum of 37 μm with no individual determination below 31 μm.

(b) *Film for bags larger than 950 mm × 680 mm up to 1020 mm × 770 mm.* When determined in accordance with Appendix A, the average thickness of film, or film in the form of bags, shall be a minimum of 49 μm, with no individual determination below 40 μm.

3.1.2 *Impact resistance.* When tested in accordance with Appendix B, the impact resistance of a single thickness of film from the bag shall be such that there is no break visible in the film when viewed under conditions of backlighting.

3.1.3 *Density.* When determined in accordance with Appendix C, the density of film shall be not greater than 940 kg/m³.

3.1.4 *Opacity.* When determined in accordance with ASTM D1003, Procedure A, the film opacity shall be such that the total luminous transmittance is a maximum of 20 percent.

3.2 Bag Dimensions and Properties.

3.2.1 *Appearance.* A domestic bag shall be free from pinholes, cuts and tears which would result in the bag being unsuitable for the use intended.

3.2.2 *Openability.* The bag shall be readily openable by hand.

3.2.3 *Length.* When measured from the opening to the base, the minimum inside length of the bag shall be 900 mm and the maximum inside length 1020 mm. This measurement shall exclude any perforated section of the bag designed to be removed for use as a closure.

3.2.4 *Width.* The internal layflat width at the top of the bag shall be a minimum of 635 mm and a maximum of 770 mm, giving a minimum circumferential opening of 1270 mm.

3.2.5 *Heat seal.* All heat seals on the bag shall be continuous. When tested in accordance with Appendix D, any heat seal shall withstand for 10 min the application of a tensile force of 4.45 N per 25 mm length of seal.

3.3 Closures. Each package of bags shall contain an equal quantity of suitable closures for sealing the bags.

4 REQUIREMENTS FOR COMMERCIAL BAG.

4.1 Film Dimensions and Properties.

4.1.1 *Film thickness.* When determined in accordance with Appendix A, the average thickness of film, or film in the form of bags, shall be a minimum of 49 μm, with no individual determination below 40 μm.

4.1.2 *Impact resistance.* When tested in accordance with Appendix B, the impact resistance of a single thickness of film from the bag shall be such that there is no break visible in the film when viewed under conditions of backlighting.

4.1.3 *Density.* When determined in accordance with Appendix C, the density of film shall be not greater than 940 kg/m³.

4.1.4 *Opacity.* When determined in accordance with ASTM D1003, Procedure A, the film opacity shall be such that the total luminous transmittance is a maximum of 20 percent.

4.2 Bag Dimensions and Properties.

4.2.1 *Appearance.* A commercial bag shall be free from pinholes, cuts and tears which would result in the bag being unsuitable for the use intended.

4.2.2 *Openability.* The bag shall be readily openable by hand.

4.2.3 *Length.* When measured from the opening to the base, the minimum inside length of the bag shall be 970 mm and the maximum inside length 1020 mm. This measurement shall exclude any perforated section of the bag designed to be removed for use as a closure.

4.2.4 *Width.* The internal layflat width at the top of the bag shall be a minimum of 750 mm and a maximum of 770 mm, giving a minimum circumferential opening of 1500 mm.

4.2.5 *Heat seal.* All heat seals on the bag shall be continuous. When tested in accordance with Appendix D, any heat seal shall withstand for 10 min the application of a tensile force of 4.45 N per 25 mm length of seal.

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* 1 kg/m³ = 10^{-3} g/cm³.