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SUPERSEDED BY

AS 2063.2—1990

Australian Standard®

Lightweight protective helmets (for use in pedal cycling, horse riding and other activities requiring similar protection)

Part 2: Helmets for pedal cyclists

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STANDARDS AUSTRALIA 

This Australian Standard was prepared by Committee CS/14, Safety Helmets for Sport and Recreation. It was approved on behalf of the Council of Standards Australia on 28 February 1990 and published on 9 April 1990.

The following interests are represented on Committee CS/14:

Attorney General's Department
Australian Federation of Consumer Organizations Inc.
Australian Harness Racing Council
Australian Manufacturers of Safety and Protective Helmets Council
Australian Sports Medicine Foundation
Bicycle Federation of Australia
Business and Consumer Affairs, N.S.W.
Confederation of Australian Industry
Consumer Affairs Bureau, Qld
Consumer Affairs Council, Tas.
Department of Sport and Recreation, Vic.
Department of Technical and Further Education, N.S.W.
Department of Transport
Department of Transport, S.A.
Ministry of Transport, Vic.
National Safety Council of Australia
Plastics Institute of Australia
Royal Melbourne Institute of Technology
State Bicycle Advisory Committee, N.S.W.
Victoria Police

Additional interests participating in preparation of Standard:

Australian Cycling Federation
Australian Retailer Association
Bicycle Industries and Traders Association
Queensland Institute of Technology
Roads and Traffic Authority of New South Wales
Retail Cycle Traders Australia
Safety Bicycle Committee, W.A.

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This Standard was issued in draft form for comment as DR 89189.

Australian Standard®

**Lightweight protective helmets (for
use in pedal cycling, horse riding
and other activities requiring similar
protection)**

Part 2: Helmets for pedal cyclists

First published as AS 2063.2—1986.
Second edition 1990.

PREFACE

This Standard was prepared by the Standards Australia Committee on Safety Helmets for Sport and Recreation.

The Standard has been updated at the request of consumer organizations and the State and Federal Governments as an intermediate step towards a complete re-evaluation of the performance and design requirements of helmets for pedal cyclists.

This new edition has replaced the requirement for a penetration test with a more meaningful test which will assess the localized loading of helmets under impact conditions.

Tests for the durability of polystyrene liners/helmets are under consideration to deal with the problem of crumbling liners discovered in a recent accident study. Consideration is also being given to lowering the test line specified in AS 2512.1.

This Standard does not specify helmet colour. However, to increase conspicuity on the road, it is recommended that helmets for pedal cyclists be manufactured white or in colours within the yellow to orange spectrum.

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DUP

AS 2063.2/Amdt 1/1990-08-20

STANDARDS AUSTRALIA

Amendment No 1

to

AS 2063.2—1990

Lightweight protective helmets (for use in pedal cycling, horse riding and other activities requiring similar protection)

Part 2: Helmets for pedal cyclists

REVISED TEXT



The 1990 edition of AS 2063.2 is amended as follows; the amendment should be inserted in the appropriate place.

SUMMARY: This Amendment applies to Clause 1.

Published on 20 August 1990.

Page 3. Clause 1.

Delete existing Clause and *substitute:*

1 SCOPE. This Standard specifies requirements for helmets for pedal cyclists that are variations from the basic performance requirements specified in AS 2063.1. The Standard includes requirements for ventilation and retention system effectiveness and distribution of localized loading. It applies to helmets for all cycling activities except BMX racing for which cyclists may require more extensive protection. This Standard is intended to supersede AS 2063.2—1986 two years after the date of publication.

NOTE: The two-year period is to allow time for manufacturers and others to adapt to the requirements of the new Standard. While the Standards are concurrent, it is expected that Statutory Authorities will recognize certified helmets to either Standard.

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No 1
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1990

STANDARDS AUSTRALIA

Australian Standard

Lightweight protective helmets (for use in pedal cycling, horse riding and other activities requiring similar protection)

Part 2: Helmets for Pedal Cyclists

1 SCOPE. This Standard specifies requirements for helmets for pedal cyclists that are variations from the basic performance requirements specified in AS 2063.1. This Standard includes requirements for ventilation and retention system effectiveness distribution of localized loading. It applies to helmets for all cycling activities except BMX racing for which cyclists may require more extensive protection. SEE AMENDMENT (1)

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

- AS Method 1:
- 2063 Lightweight protective helmets (for use in pedal cycling, horse riding and other activities)
- 2063.1 Part 1: Basic performance requirements
- 2512 Methods of testing protective helmets
- 2512.1 Method 1: Definitions and headforms
- 2512.2 Method 2: General requirements for the conditioning and preparation of test specimens and laboratory conditions
- 2512.7 Method 7: Determination of stability of lightweight protective helmets
- 2512.9 Method 9: Determination of resistance to localized loading

3 BASIC PERFORMANCE REQUIREMENTS. Helmets for pedal cyclists shall comply with AS 2063.1. Except for the requirements for—

- (a) hard shell;
- (b) ventilation openings;
- (c) resistance to penetration; and
- (d) type testing.

4 VENTILATION. Helmets for pedal cyclists shall incorporate features designed to transfer heat from the head.

5 TYPE TESTING. For the purpose of type testing eight helmets of the same size, and representative of production lots shall be tested for compliance with this Standard. Each of four pairs of helmets shall be subjected to a different conditioning procedure specified in AS 2512.2. Additional helmets may be required for the helmet stability test, (see Clause 6.2).

NOTE: Type tests provide an indication only of the capacity of a model of helmet to pass subsequent production tests. Manufacturers are warned to conduct extensive exploratory tests of prototype helmets prior to the submission of samples for type tests.

Helmets shall be in the condition in which they are offered for sale and shall be accompanied by all attachments, including protective eye devices, normally sold with the helmet.

6 RETENTION SYSTEM.

6.1 General. If one helmet is to be used for the helmet stability test and for the performance tests specified in AS 2063.1, the helmet stability test shall be performed first.

Headforms for the helmet stability test are specified in AS 2512.7.

Helmets for pedal cyclists shall be tested on an A or J headform, or both, whichever is appropriate to the helmet's size range.

6.2 Helmet stability. When tested in accordance with AS 2512.7, using a force of 50 ± 0.5 N for a period of not less than 15 s and not greater than 30 s, the helmet shall neither completely expose, nor completely obscure the test band. If the helmet has a detachable peak, the peak shall be removed for the test.

6.3 Retaining strap. Any part of the retaining strap which, when properly fastened, contacts the throat on the underside of the wearer's chin shall be not less than 12 mm wide.

Retention systems shall be adjustable to produce tension on straps between all shell fixing points when the retaining strap is properly fastened.