(Superseding BS 2L 80)

Specification for

# Sheet and strip of aluminium-2¼ % magnesium alloy —

(Temper designation—0)

UDC 629.7:669.715′721 – 41



# Committees responsible for this British Standard

The preparation of this British Standard was entrusted by the Aerospace Standards Committee (ACE/-) to Technical Committee ACE/24 upon which the following bodies were represented:

Aluminium Federation

Aluminium Stockholders' Association

Association of Light Alloy Refiners Limited

BNF Metals Technology Centre

British Forging Industry Association

British Industrial Fasteners Federation

British Investment Casting Trade Association

Institute of British Foundrymen

Light Metal Founders' Association

Magnesium Industry Council

Ministry of Defence

Society of British Aerospace Companies Limited

This British Standard, having been prepared under the direction of the Aerospace Standards Committee, was published under the authority of the Board of BSI and comes into effect on 31 December 1985

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The following BSI references relate to the work on this standard: Committee reference ACE/24 Draft for comment 81/77624 DC

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#### Amendments issued since publication

Amd. No.	Date of issue	Comments

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NOTE 1  $\,$  Other forms of material of the same composition are covered by the following British Standards:

 ${\rm BS}\;{\rm L}$  44, Forging stock, bars, extruded sections and forgings.

BS L 56, Tube (Temper designation—0) (Seamless: tested hydraulically).

BS L 81, Sheet and strip (Temper designation H16 or H26).

NOTE 2 The chemical composition of this material complies with that registered as International Designation 5251.

NOTE 3 The title of the publication referred to in this standard is listed on the inside back cover.

A British Standard does not purport to include all the necessary provisions of a contract. Users of British Standards are responsible for their correct application.

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#### Summary of pages

This document comprises a front cover, an inside front cover, pages i and ii, pages 1 and 2, an inside back cover and a back cover.

This standard has been updated (see copyright date) and may have had amendments incorporated. This will be indicated in the amendment table on the inside front cover.

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#### 1 Inspection and testing procedure

This British Standard shall be used in conjunction with the relevant sections of the latest issue of BS L 100.

#### 2 Quality of material

The material shall be made from aluminium of the chemical composition specified in clause 3, with or without approved scrap at the discretion of the manufacturer.

#### 3 Chemical composition

The chemical composition of the material shall be:

Element	%			
Element	min.	max.		
Silicon	_	0.40		
Iron	_	0.50		
Copper	_	0.15		
Manganese	0.10	0.50		
Magnesium	1.70	2.40		
Chromium	_	0.15		
Zinc <sup>a</sup>	_	0.15		
Titaniuma	_	0.15		
Others: each	_	0.05		
Others: total	_	0.15		
Aluminium	_	Remainder		

<sup>&</sup>lt;sup>a</sup> Subject to the discretion of the Quality Assurance Authority, determination of these elements need be made on a small proportion only of the samples analysed.

#### 4 Condition

The material shall be supplied annealed.

#### 5 Heat treatment

None.

#### 6 Mechanical properties

**6.1 Tensile test.** The mechanical properties obtained from test pieces selected and prepared in accordance with the relevant requirements of BS L 100 shall be as follows:

Nominal thickness	0.2 % proof stress	Tensile strength		Elongation on gauge length of 50 mm
	min.	min.	max.	min.
mm	MPa	MPa	MPa	%
0.4 up to and including 2.6	60	160	200	18
Over 2.6 up to and including 6.0	60	160	200	20

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# Publication referred to

 ${\rm BS\;L\;100}, Procedure\; for\; inspection\; and\; testing\; of\; wrought\; aluminium\; and\; aluminium\; alloys.$ 

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