

ISO

INTERNATIONAL ORGANIZATION FOR STANDARDIZATION

ISO RECOMMENDATION R 207

COMPOSITION OF 99.95 UNALLOYED MAGNESIUM INGOTS

1st EDITION

July 1961

COPYRIGHT RESERVED

The copyright of ISO Recommendations and ISO Standards belongs to ISO Member Bodies. Reproduction of these documents, in any country, may be authorized therefore only by the national standards organization of that country, being a member of ISO.

For each individual country the only valid standard is the national standard of that country.

Printed in Switzerland

Also issued in French and Russian. Copies to be obtained through the national standards organizations.

BRIEF HISTORY

The ISO Recommendation R 207, *Composition of 99.95 Unalloyed Magnesium Ingots*, was drawn up by Technical Committee ISO/TC 79, *Light Metals and their Alloys*, the Secretariat of which is held by the Association Française de Normalisation (AFNOR).

Work on this matter, which was begun by the Technical Committee in 1958, was completed in the same year with the adoption of a proposal as a Draft ISO Recommendation.

On 20 November 1959, the Draft ISO Recommendation (No. 325) was distributed to all the ISO Member Bodies and was approved by the following Member Bodies:

Australia	India	Romania
Belgium	Israel	Spain
Burma	Italy	Sweden
Canada	Japan	Switzerland
Chile	Netherlands	United Kingdom
France	New Zealand	U.S.A.
Germany	Poland	U.S.S.R.
Hungary	Portugal	

No Member Body opposed the approval of the Draft.

The Draft ISO Recommendation was then submitted by correspondence to the ISO Council, which decided, in July 1961, to accept it as an ISO RECOMMENDATION.

COMPOSITION OF 99.95 UNALLOYED MAGNESIUM INGOTS

1. SCOPE

This ISO Recommendation relates to ingots for general purposes. Special applications may require stricter limitation of certain specified or unspecified elements.

2. DEFINITION

Unalloyed magnesium is defined

- (a) by the maximum contents of the following specified elements: aluminium, manganese, zinc, silicon, copper, iron, nickel, lead and tin;
- (b) by the total maximum content of the above elements. The difference between this total and 100 is the conventional designation of the unalloyed magnesium;
- (c) by the total maximum content of the three elements: iron, nickel and copper;
- (d) by the maximum content of any other elements which may be present in the magnesium.

3. CHEMICAL COMPOSITION (PER CENT)

3.1 Conventional designation: 99.95.

3.2 (a) Maximum permissible impurities:

Aluminium	(Al)	:	not more than	0.01
Manganese	(Mn)	:	» » »	0.01
Zinc	(Zn)	:	» » »	0.01
Silicon	(Si)	:	» » »	0.01
Copper	(Cu)	:	» » »	0.002
Iron	(Fe)	:	» » »	0.003
Nickel	(Ni)	:	» » »	0.001
Lead	(Pb)	:	» » »	0.005
Tin	(Sn)	:	» » »	0.001

(b) Total of above elements:

Aluminium + Manganese + Zinc + Silicon + Copper + Iron + Nickel + Lead + Tin
(Al + Mn + Zn + Si + Cu + Fe + Ni + Pb + Sn): not more than 0.05.

(c) Total Iron + Nickel + Copper (Fe + Ni + Cu): not more than 0.005.

(d) Any other element: not more than 0.01.