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# INTERNATIONAL STANDARD



# 2119

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INTERNATIONAL ORGANIZATION FOR STANDARDIZATION • МЕЖДУНАРОДНАЯ ОРГАНИЗАЦИЯ ПО СТАНДАРТИЗАЦИИ • ORGANISATION INTERNATIONALE DE NORMALISATION

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## Magnesium-zinc-zirconium alloy castings – Chemical composition

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Price based on 1 page

**FOREWORD**

ISO (the International Organization for Standardization) is a worldwide federation of national standards institutes (ISO Member Bodies). The work of developing International Standards is carried out through ISO Technical Committees. Every Member Body interested in a subject for which a Technical Committee has been set up has the right to be represented on that Committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work.

Draft International Standards adopted by the Technical Committees are circulated to the Member Bodies for approval before their acceptance as International Standards by the ISO Council.

International Standard ISO 2119 was drawn up by Technical Committee ISO/TC 79, *Light metals and their alloys*.

It was approved in June 1971 by the Member Bodies of the following countries:

|                     |                       |                |
|---------------------|-----------------------|----------------|
| Austria             | Israel                | Sweden         |
| Belgium             | Italy                 | Switzerland    |
| Canada              | Japan                 | Thailand       |
| Egypt, Arab Rep. of | Norway                | Turkey         |
| France              | Poland                | United Kingdom |
| Germany             | Portugal              | U.S.A.         |
| Greece              | Romania               | U.S.S.R.       |
| India               | South Africa, Rep. of |                |

No Member Body expressed disapproval of the document.

# Magnesium-zinc-zirconium alloy castings – Chemical composition

## 1 SCOPE AND FIELD OF APPLICATION

This International Standard specifies the chemical compositions of castings in a series of magnesium-zinc-zirconium alloys.

## 2 CHEMICAL COMPOSITION

The chemical composition of castings in the relevant alloys shall be as given in the following table.

| Alloy         | Zn %       | Rare earths (RE) %      | Zr %        | Th %       | Cu % max. | Ni % max. |
|---------------|------------|-------------------------|-------------|------------|-----------|-----------|
| Mg-RE3 Zn2 Zr | 0.8 to 3.0 | 2.5 to 4.0              | 0.40 to 1.0 | —          | 0.10      | 0.01      |
| Mg-Zn5 Zr     | 3.5 to 5.5 | —                       | 0.40 to 1.0 | —          | 0.10      | 0.01      |
| Mg-Zn4 RE Zr  | 3.5 to 5.0 | 0.75 to 1.75            | 0.40 to 1.0 | —          | 0.10      | 0.01      |
| Mg-Zn6 Th2 Zr | 5.0 to 6.2 | —                       | 0.40 to 1.0 | 1.5 to 2.3 | 0.10      | 0.01      |
| Mg-Th3 Zn2 Zr | 1.7 to 2.5 | 0.10 max. <sup>1)</sup> | 0.40 to 1.0 | 2.5 to 4.0 | 0.10      | 0.01      |
| Mg-Zn6 Zr     | 5.5 to 6.5 | —                       | 0.60 to 1.0 | —          | 0.10      | 0.01      |

1) Analysis is not ordinarily made but, if required, the result shall be less than the maximum indicated value.

### NOTES

- 1 It is the responsibility of the supplier to ensure that any element not specifically limited by this International Standard is not present in an amount such as is generally accepted as having an adverse effect on the product. If the purchaser requires limits for any element not specified, these are to be agreed upon between supplier and purchaser.
- 2 In French, TR is used to indicate rare earths (RE).