

MAURITIAN  
STANDARD

**MS ISO 21482:2007**

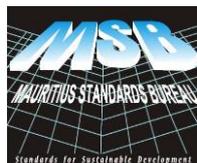
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**Ionizing-radiation warning —  
Supplementary symbol**

ICS 01.080.20; 13.280



**Mauritius Standards Bureau  
Moka**

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## National foreword

This Mauritian Standard is identical with the International Standard **ISO 21482:2007(E)**, *Ionizing-radiation warning — Supplementary symbol*. It was adopted by the Mauritius Standards Bureau on the recommendation of the **Metrology Standards Committee** and approval of the Standards Council on 28 March 2013. It was notified in the Government Gazette on **13 April 2013**. \*

For the purposes of this standard the following change should be made:

- Wherever the words 'International Standard' appear, referring to this standard, they should be read as 'Mauritian Standard'.

\* General Notice No. 1000 of 2013



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## Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established 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. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights.

ISO 21482 was prepared by Technical Committee ISO/TC 85, *Nuclear energy*, Subcommittee SC 2, *Radiation protection*.

## Introduction

The basic ionizing-radiation symbol, “the trefoil” [ISO 361, ISO 7010:2003, Table 1 (Reference number W003)], is used internationally to indicate the presence of radiation. There is a history of people, in particular those persons with insufficient technical education or background, receiving serious injuries or fatalities from handling large sealed radioactive sources and not correctly understanding the meaning of the basic ionizing radiation symbol on the source. The ability to interpret and understand the symbol is of crucial importance for all people.

With these problems in mind, the competent UN authority, the International Atomic Energy Agency (IAEA) with direction from the international community saw a necessity to develop a new symbol that is capable of fulfilling all the requirements placed on a warning symbol.

For that purpose, the IAEA designed a number of symbols with different colours and shapes and evaluated them in a number of preliminary tests. A series of assessments and comparisons were completed among people with insufficient technical education or background, children and among different cultures in 11 different countries. The result is put forth in this International Standard.

This symbol is intended to supplement the basic ionizing radiation symbol.

PREVIEW

## Ionizing-radiation warning — Supplementary symbol

### 1 Scope

This International Standard specifies the symbol to warn of the presence of a dangerous level of ionizing radiation from a high-level sealed radioactive source that can cause death or serious injury if handled carelessly. This symbol is not intended to replace the basic ionizing radiation symbol [ISO 361, ISO 7010:2003, Table 1 (Reference number W003)], but to supplement it by providing further information on the danger associated with the source and the necessity for untrained or uninformed members of the public to stay away from it.

This symbol is recommended for use with International Atomic Energy Agency (IAEA) Category 1, 2, and 3 sealed radioactive sources. These sources are defined by the IAEA as having the ability to cause death or serious injuries.

### 2 Shape, proportions and colour of the symbol

The supplementary ionizing radiation warning symbol (see Figures 1 and A.1) is diagrammed below.

The symbol shall have a red (pantone red No. 187) background with black figures and a white outline of the figures. The symbol is acceptable without colour if the use of colour is not feasible, such as in the case of engraving the symbol on the source. The symbol should not be made smaller than 3,0 cm to assure that it is clearly visible.



Figure 1 — Supplementary ionizing radiation warning symbol

See Figures A.2 to A.6 for the individual elements of which this symbol is composed.