

---

# International Standard



# 6112

---

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

---

## Plastics moulded footwear — Lined or unlined polyvinyl chloride industrial boots with general purpose resistance to oils and fats

*Articles chaussants moulés en plastique — Bottes en polychlorure de vinyle, doublées ou non, à usage industriel, résistant aux corps gras d'usage général*

First edition — 1982-11-15

STANDARDSISO.COM : Click to view the full PDF of ISO 6112:1982

---

UDC 685.314.3 : 678.743.22

Ref. No. ISO 6112-1982 (E)

Descriptors : plastics products, polyvinyl chloride, footwear, boots (footwear), oil resistance, marking.

## 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 6112 was developed by Technical Committee ISO/TC 45, *Rubber and rubber products*, and was circulated to the member bodies in December 1980.

It has been approved by the member bodies of the following countries :

Australia	Iraq	Sri Lanka
Austria	Korea, Dem. P. Rep. of	Sweden
Belgium	Korea, Rep. of	Thailand
Brazil	Netherlands	Turkey
Canada	Portugal	United Kingdom
Czechoslovakia	Romania	USA
Denmark	South Africa, Rep. of	USSR
India	Spain	

The member body of the following country expressed disapproval of the document on technical grounds :

France

# Plastics moulded footwear — Lined or unlined polyvinyl chloride industrial boots with general purpose resistance to oils and fats

## 1 Scope and field of application

This International Standard specifies requirements for lined or unlined moulded polyvinyl chloride (PVC) industrial boots having oil resistance consistent with general purpose industrial usage. Where resistance to specific liquids is required, the advice and recommendations of the footwear manufacturer shall be sought.

## 2 References

ISO 471, *Rubber — Standard temperatures, humidities and times for the conditioning and testing of test pieces.*

ISO 4643, *Plastics moulded footwear — Polyvinyl chloride industrial boots — Specification.*

## 3 Requirements

### 3.1 General

Boots shall comply with the requirements of ISO 4643 except for marking.

### 3.2 Oil resistance of soling

Two test pieces, 25 mm wide by 150 mm long, shall be taken from the soling and reduced to an overall thickness of 7 mm, inclusive of a maximum of 3 mm of sole pattern, by cutting and very light buffing on both sides. The test pieces shall then be immersed in oleic acid for a period of 120 h at a standard laboratory temperature (see ISO 471).

After immersion, the test pieces shall be wiped dry with a dry cloth or tissue and tested for resistance to cut growth by the method specified in annex B of ISO 4643 at a temperature of  $-5 \pm 2$  °C. The minimum number of flex cycles to achieve not more than 6 mm cut growth (8 mm crack) shall be 150 000.

### 3.3 Oil resistance of upper

Two test pieces,  $64 \pm 2$  mm wide and  $64 \pm 2$  mm long, shall be taken from the upper part of the boot. The lining shall be removed from test pieces by splitting it off using a leather splitting machine or by careful use of a suitable solvent, such as methyl ethyl ketone, or by buffing. The test pieces shall then be immersed in oleic acid for a period of 120 h at a standard laboratory temperature (see ISO 471).

After immersion, the test pieces shall be wiped dry with a dry cloth or tissue and tested for resistance to flexing by the method specified in annex C of ISO 4643 at a temperature of  $-5 \pm 2$  °C. No cracks shall have formed after a total of 150 000 flex cycles.

## 4 Marking

Each boot shall be indelibly and legibly marked with the following particulars :

- a) size;
- b) manufacturer's or supplier's identification;
- c) a reference number issued by the appropriate national standards institute.