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International Standard



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## Unplasticized polyvinyl chloride (PVC) pipes and fittings — Determination and specification of density

*Tubes et raccords en polychlorure de vinyle (PVC) non plastifié — Détermination et spécification de la masse volumique*

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## 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.

Internal Standard ISO 4439 was developed by Technical Committee ISO/TC 138, *Plastics pipes, fittings and valves for the transport of fluids*, and was circulated to the member bodies in July 1977.

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

Australia	India	Poland
Belgium	Ireland	Romania
Bulgaria	Israel	South Africa, Rep. of
Chile	Italy	Spain
Czechoslovakia	Japan	Sweden
Denmark	Korea, Rep. of	Switzerland
Finland	Mexico	Turkey
France	Netherlands	USSR
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The member bodies of the following countries expressed disapproval of the document on technical grounds :

United Kingdom  
USA

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# Unplasticized polyvinyl chloride (PVC) pipes and fittings — Determination and specification of density

## 1 Scope and field of application

This International Standard specifies a method for the determination of density of pipes and fittings of unplasticized polyvinyl chloride (PVC) and lays down the permissible limits for this density.

The material from which the pipes and fittings are made is essentially polyvinyl chloride to which only the additives required for their manufacture have been added.

This International Standard does not apply to pipes and fittings made from compounds containing fillers, or to cellular products.

## 2 Reference

ISO/R 1183, *Plastics — Methods for determining the density and relative density (specific gravity) of plastics, excluding cellular plastics.*

## 3 Specification

The density at 23 °C of an unplasticized polyvinyl chloride (PVC) pipe or fitting,  $\rho_{23}$ , measured by the method described in ISO/R 1183, shall be between the following limits :

$$1,35 \text{ g/cm}^3 < \rho_{23} < 1,46 \text{ g/cm}^3$$