

INTERNATIONAL
STANDARD

ISO
10931-2

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**Plastics piping systems for industrial
applications — Poly(vinylidene fluoride)
(PVDF) —**

Part 2:
Pipes

*Système de canalisation en matières plastiques pour les applications
industrielles — Poly(fluorure de vinylidène) (PVDF) —*

Partie 2: Tubes



Reference number
ISO 10931-2:1997(E)

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.

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.

International Standard ISO 10931-2 was prepared by Technical Committee ISO/TC 138, *Plastics pipes, fittings and valves for the transport of fluids*, Subcommittee SC 3, *Plastics pipes and fittings for industrial applications*.

ISO 10931 consists of the following parts, under the general title *Plastics piping systems for industrial applications — Poly(vinylidene fluoride) (PVDF)*:

- *Part 1: General*
- *Part 2: Pipes*
- *Part 3: Fittings*
- *Part 4: Valves and auxiliary equipment*
- *Part 5: Fitness for system purpose*
- *Part 6: Recommendations for installation*

Annex A of this part of ISO 10931 is for information only.

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Introduction

ISO 10931, which is divided into six parts (see Foreword), specifies the properties of pipes and piping system components made of poly(vinylidene fluoride) (PVDF) for industrial applications. It includes recommendations for installation (see ISO 10931-6) and is intended to be used by authorities, design engineers, testing and certification institutes and manufacturers. This part of ISO 10931 covers the characteristics of pipes.

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Plastics piping systems for industrial applications — Poly(vinylidene fluoride) (PVDF) —

Part 2: Pipes

1 Scope

This part of ISO 10931 specifies the requirements for poly(vinylidene fluoride) (PVDF) pipes intended for industrial applications, which include the conveyance of water and chemicals in liquid and gaseous forms.

It also specifies the parameters for the test methods referred to in this part of ISO 10931.

It is applicable to PVDF pipes intended for the conveyance of fluids under pressure at temperatures up to 150 °C. However, for applications above 120 °C, which depend on the crystalline melting point of the specific PVDF grade being used, the advice of the pipe and fittings manufacturers should be sought.

NOTE — For information about the resistance of PVDF materials in contact with chemicals, see ISO/TR 10358.

2 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this part of ISO 10931. At the time of publication, the editions indicated were valid. All standards are subject to revisions, and parties to agreements based on this part of ISO 10931 are encouraged to investigate the possibility of applying the most recent editions of the standards listed below. Members of IEC and ISO maintain registers of currently valid International Standards.

ISO 1167:1996, *Thermoplastics pipes for the transport of fluids — Resistance to internal pressure — Test method.*

ISO 2505-1:1994, *Thermoplastics pipes — Longitudinal reversion — Part 1: Determination methods.*

ISO 3126:1974, *Plastics pipes — Measurement of dimensions.*

ISO 4065:1996, *Thermoplastics pipes — Universal wall thickness table.*

ISO/TR 8584-2:1993, *Thermoplastics pipes for industrial applications under pressure — Determination of the chemical resistance factor and of the basic stress — Part 2: Pipes made of halogenated polymers.*

ISO/TR 9080:1992, *Thermoplastics pipes for the transport of fluids — Methods of extrapolation of hydrostatic stress rupture data to determine the long-term hydrostatic strength of thermoplastics pipe materials.*

ISO 10931-1:1997, *Plastics piping systems for industrial applications — PVDF — Part 1: General.*

ISO 11922-1:1977¹⁾, *Thermoplastics pipes for the transport of fluids — Dimensions and tolerances.*

ISO 12162:1995, *Thermoplastics materials for pipes and fittings for pressure applications — Classification and designation — Overall service (design) coefficient.*

1) To be published.