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**Plastomerne cevi za transport fluidov - Ugotavljanje odpornosti proti hitremu širjenju razpoke (RCP) - Preskus "Small-scale steady-state" (preskus S4) (ISO 13477:2008)**

Thermoplastics pipes for the conveyance of fluids - Determination of resistance to rapid crack propagation (RCP) - Small-scale steady-state test (S4 test) (ISO 13477:2008)

Rohre aus Thermoplasten für den Transport von Flüssigkeiten - Bestimmung des Widerstandes gegen schnelle Rissfortpflanzung (RCP) - Laborprüfung (S4 test) (ISO 13477:2008)

Tubes en matières thermoplastiques pour le transport des fluides - Détermination de la résistance à la propagation rapide de la fissure (RCP) - Essai à petite échelle (S4) (ISO 13477:2008)

**Ta slovenski standard je istoveten z: EN ISO 13477:2008**

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**ICS:**

23.040.20 Cevi iz polimernih materialov Plastics pipes

**SIST EN ISO 13477:2008****en**

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English Version

Thermoplastics pipes for the conveyance of fluids -  
Determination of resistance to rapid crack propagation (RCP) -  
Small-scale steady-state test (S4 test) (ISO 13477:2008)

Tubes en matières thermoplastiques pour le transport des  
fluides - Détermination de la résistance à la propagation  
rapide de la fissure (RCP) - Essai à petite échelle à état  
constant (essai S4) (ISO 13477:2008)

Rohre aus Thermoplasten für den Transport von Fluiden -  
Bestimmung des Widerstandes gegenüber schneller  
Rissfortpflanzung (RCP) - Laborprüfung (S4-Prüfung) (ISO  
13477:2008)

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## Foreword

This document (EN ISO 13477:2008) has been prepared by Technical Committee ISO/TC 138 "Plastics pipes, fittings and valves for the transport of fluids" in collaboration with Technical Committee CEN/TC 155 "Plastics piping systems and ducting systems" the secretariat of which is held by NEN.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by September 2008, and conflicting national standards shall be withdrawn at the latest by September 2008.

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

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**Thermoplastics pipes for the conveyance  
of fluids — Determination of resistance  
to rapid crack propagation (RCP) —  
Small-scale steady-state test (S4 test)**

*Tubes en matières thermoplastiques pour le transport des fluides —  
Détermination de la résistance à la propagation rapide de la fissure  
(RCP) — Essai à petite échelle à état constant (essai S4)*

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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 13477 was prepared by Technical Committee ISO/TC 138, *Plastics pipes, fittings and valves for the transport of fluids*, Subcommittee SC 5, *General properties of pipes, fittings and valves of plastic materials and their accessories — Test methods and basic specifications*.

This second edition cancels and replaces the first edition (ISO 13477:1997), which has been technically revised.

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# Thermoplastics pipes for the conveyance of fluids — Determination of resistance to rapid crack propagation (RCP) — Small-scale steady-state test (S4 test)

## 1 Scope

This International Standard specifies a small-scale (S4) test method for determining the arrest or propagation of a crack initiated in a thermoplastics pipe at a specified temperature and internal pressure.

This International Standard is applicable to the assessment of the performance of thermoplastics pipes intended for the supply of gases or liquids. In the latter case, air can also be present in the pipe.

NOTE This test method was developed using monolayer thermoplastics pipes. Its applicability to multi-layer/coated pipes has yet to be fully confirmed and is under study.

## 2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 13477:2008  
<https://standards.iteh.ai/catalog/standards/sist/f3814ec4-2ccb-44b9-94a0-f5b17000-conveyance-so-3171-2008>  
ISO 161-1, *Thermoplastics pipes for the conveyance of fluids — Nominal outside diameters and nominal pressures — Part 1: Metric series*

ISO 1167-1, *Thermoplastics pipes, fittings and assemblies for the conveyance of fluids — Determination of the resistance to internal pressure — Part 1: General method*

ISO 3126, *Plastics piping systems — Plastics components — Determination of dimensions*

ISO 11922-1, *Thermoplastics pipes for the conveyance of fluids — Dimensions and tolerances — Part 1: Metric series*

## 3 Terms and definitions

For the purposes of this International Standard, the terms and definitions given in ISO 161-1 and ISO 11922-1 apply.

## 4 Symbols and abbreviated terms

$d_{i,min}$  minimum internal diameter, in millimetres, of pipe

$d_n$  nominal external diameter, in millimetres, of pipe

$e_n$  nominal wall thickness, in millimetres, of pipe