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**SANS 9854-2:1994**

Edition 1 and nat. amdt 1

**ISO 9854-2:1994**

Edition 1

Any reference to SABS ISO 9854-2 is deemed  
to be a reference to this standard  
(Government Notice No. 1373 of 8 November 2002)

## **SOUTH AFRICAN NATIONAL STANDARD**

# **Thermoplastics pipes for the transport of fluids — Determination of pendulum impact strength by the Charpy method**

## **Part 2: Test conditions for pipes of various materials**

This national standard is the identical implementation of ISO 9854-2:1994 and is adopted with the permission of the International Organization for Standardization.

**SANS 9854-2:1994**

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Edition 1

**Table of changes**

<b>Change No.</b>	<b>Date</b>	<b>Scope</b>
Nat. amdt 1	2007	Amended to change the designation from SABS to SANS, with no technical changes.

**National foreword**

This South African standard was approved by National Committee SABS SC 138H, *Water and sanitation – Equipment and systems – Plastics pipes and fittings*, in accordance with procedures of the SABS Standards Division, in compliance with annex 3 of the WTO/TBT agreement.

This SANS document was published in xxxx 2007. This SANS document supersedes SABS ISO 9854-2:1994 (edition 1).

<p><b>Reaffirmed and reprinted in July 2012. This standard will be reviewed every five years and be reaffirmed, amended, revised or withdrawn.</b></p>
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**ISO**  
**9854-2**

First edition  
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**Thermoplastics pipes for the transport of  
fluids — Determination of pendulum  
impact strength by the Charpy method —**

**Part 2:**

Test conditions for pipes of various materials

*Tubes thermoplastiques pour le transport des fluides — Détermination de  
la résistance aux chocs pendulaires par la méthode Charpy —*

*Partie 2: Conditions d'essai pour différentes matières constitutives de  
tubes*



Reference number  
ISO 9854-2:1994(E)

## ISO 9854-2:1994(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 9854-2 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*.

ISO 9854 consists of the following parts, under the general title *Thermoplastics pipes for the transport of fluids — Determination of pendulum impact strength by the Charpy method*.

- *Part 1: General test method*
- *Part 2: Test conditions for pipes of various materials*

Annex A of this part of ISO 9854 is for information only.

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# Thermoplastics pipes for the transport of fluids — Determination of pendulum impact strength by the Charpy method —

## Part 2:

## Test conditions for pipes of various materials

### 1 Scope

This part of ISO 9854 specifies the values or options chosen for the test parameters, i.e. the impact energy, test piece dimensions, shape and spacing of the test piece supports, and type of test piece, for testing the impact resistance (pendulum method) of thermoplastics pipes of the following materials, when tested in accordance with ISO 9854-1.

It applies to pipes made of unplasticized poly(vinyl chloride) (PVC-U), unplasticized poly(vinyl chloride), for extrusion, impact modified (PVC-U,EP), chlorinated poly(vinyl chloride) (PVC-C), acrylonitrile/butadiene/styrene (ABS), acrylonitrile/styrene/acrylate (ASA) and polypropylene (PP) and propylene-copolymer.

This test is not intended to be a reference test method for determining the impact strength of pipes.

### 2 Normative reference

The following standard contains provisions which, through reference in this text, constitute provisions of this part of ISO 9854. At the time of publication, the edition indicated was valid. All standards are subject to revision, and parties to agreements based on this part of ISO 9854 are encouraged to investigate the

possibility of applying the most recent edition of the standard indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

ISO 9854-1:1994, *Thermoplastics pipes for the transport of fluids — Determination of pendulum impact strength by the Charpy method — Part 1: General test method.*

### 3 Specific test conditions

#### 3.1 General

For testing in accordance with ISO 9854-1, the values or options for the test parameters shall comply with those specified in table 1, 2, 3 or 4 of this part of ISO 9854, and with 3.2, 3.3, 3.4 or 3.5, as appropriate, depending on the material of which the pipe is made, and its size.

#### 3.2 PVC-U and PVC-U,EP pipes

See table 1.

#### 3.3 PVC-C pipes

See table 2.