

SS 375:Part 3:2015(2024)+A1:2024+C1:2024
BS 6920-3:2000, IDT
(ICS 13.060.20)

SINGAPORE STANDARD

Suitability of non-metallic materials and products for use in contact with water intended for human consumption with regard to their effect on the quality of the water

– Part 3: High temperature tests

Incorporating Amendment No. 1 and Corrigendum No. 1

Confirmed 2024

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National Foreword

This Singapore Standard was prepared by the Working Group on Water Quality set up by the Technical Committee on Water under the purview of the Environment and Resources Standards Committee.

This standard is a confirmation of SS 375: Part 3: 2015. It is an identical adoption of BS 6920-3:2000, “Suitability of non-metallic products for use in contact with water intended for human consumption with regard to their effect on the quality of the water – Part 3: High temperature tests”, published by the British Standards Institution. It incorporates Amendment No.1, March 2024 denoted by A1 A1 and Corrigendum No. 1, December 2024 denoted by C1 C1.

NOTE 1 – Where appropriate, the words “British Standard” are read as “Singapore Standard”.

NOTE 2 – Reference to International/Overseas Standards are replaced by applicable Singapore Standards or Technical References.

Attention is drawn to the possibility that some of the elements of this Singapore Standard may be the subject of patent rights. Enterprise Singapore shall not be held responsible for identifying any or all of such patent rights.

NOTE

- 1. Singapore Standards (SSs) and Technical References (TRs) are reviewed periodically to keep abreast of technical changes, technological developments and industry practices. The changes are documented through the issue of either amendments or revisions. Where SSs are deemed to be stable, i.e. no foreseeable changes in them, they will be classified as “mature standards”. Mature standards will not be subject to further review, unless there are requests to review such standards.*
- 2. An SS or TR is voluntary in nature except when it is made mandatory by a regulatory authority. It can also be cited in contracts making its application a business necessity. Users are advised to assess and determine whether the SS or TR is suitable for their intended use or purpose. If required, they should refer to the relevant professionals or experts for advice on the use of the document. Enterprise Singapore and the Singapore Standards Council shall not be liable for any damages whether directly or indirectly suffered by anyone or any organisation as a result of the use of any SS or TR. Although care has been taken to draft this standard, users are also advised to ensure that they apply the information after due diligence.*
- 3. Compliance with a SS or TR does not exempt users from any legal obligations*

Introduction

Non-metallic products used in contact with hot and boiling water can leach water soluble compounds not detectable in significant quantities when tested under the conditions of test described in SS 375 : Part 2. Such products, if satisfactory in the tests described in Part 2, can be tested by the methods described in this part of SS 375 if they are intended for use in hot domestic water installations where the water in contact with the product will pass to a draw-off point and hence could be used for drinking or culinary purposes. Materials use in plastics kettles can also be assessed for suitability for drinking purposes using these tests.

NOTE – It is recommended that no boiling water tests are undertaken on non-metallic products until these products have been shown to comply with the complete requirements of SS 375, including an Odour and Flavour assessment undertaken at 85°C.

Specification for suitability of non-metallic $\boxed{A_1}$ materials $\langle A_1 \rangle$ and products for use in contact with water intended for human consumption with regard to their effect on the quality of the water – Part 3 : High temperature tests

1 Scope

This part of SS 375 describes methods designed to assess the ability of a non-metallic product to affect hot and boiling water intended for human consumption by imparting a discernible odour or flavour, or any noticeable colour or turbidity. It is also applicable in assessing the leachability in hot or boiling water of metals from non-metallic products and the extraction from such products of substances that may be of concern to public health. It is not applicable to the test for growth of aquatic microorganisms (see SS 375 : Part 2:4). Products used exclusively in industrial or steam services are excluded.

2 Normative references

The following normative documents contain provisions which, through reference in this text, constitute provisions of this part of SS 375. For dated references, subsequent amendments to or revisions of any of these publications do not apply. For undated references, the latest edition of the publication referred to applies.

- a) SS 375 : Part 1 : 2001, Suitability of non-metallic $\boxed{A_1}$ materials $\langle A_1 \rangle$ and products for use in contact with water intended for human consumption with regard to their effect on the quality of the water – Part 1 : Specification.
- b) SS 375 : Part 2:2:1, Suitability of non-metallic $\boxed{A_1}$ materials $\langle A_1 \rangle$ and products for use in contact with water intended for human consumption with regard to their effect on the quality of the water – Part 2:2:1 : Methods of test – Odour and flavour of water – General method of test.
- c) SS 375 : Part 2:2:2, Suitability of non-metallic $\boxed{A_1}$ materials $\langle A_1 \rangle$ and products for use in contact with water intended for human consumption with regard to their effect on the quality of the water – Part 2:2:2 : Methods of test – Odour and flavour of water – Method of testing odour and flavours imparted to water by hoses.
- d) SS 375 : Part 2:2:3, Suitability of non-metallic $\boxed{A_1}$ materials $\langle A_1 \rangle$ and products for use in contact with water intended for human consumption with regard to their effect on the quality of the water – Part 2:2:3 : Methods of test – Odour and flavour of water – Method of testing odour and flavours imparted to water by hoses for conveying water for food and drink preparation.
- e) SS 375 : Part 2:3, Suitability of non-metallic $\boxed{A_1}$ materials $\langle A_1 \rangle$ and products for use in contact with water intended for human consumption with regard to their effect on the quality of the water – Part 2:3 : Methods of test – Appearance of water.
- f) SS 375 : Part 2:4, Suitability of non-metallic $\boxed{A_1}$ materials $\langle A_1 \rangle$ and products for use in contact with water intended for human consumption with regard to their effect on the quality of the water – Part 2:4 : Methods of test – Growth of aquatic microorganisms.
- g) SS 375 : Part 2:5, Suitability of non-metallic $\boxed{A_1}$ materials $\langle A_1 \rangle$ and products for use in contact with water intended for human consumption with regard to their effect on the quality of the water – Part 2:5 : Methods of test – The extraction of substances that may be of concern to public health.
- h) SS 375 : Part 2:6, Suitability of non-metallic $\boxed{A_1}$ materials $\langle A_1 \rangle$ and products for use in contact with water intended for human consumption with regard to their effect on the quality of the water – Part 2:6 : Methods of test – The extraction of metals.