



**BSI Standards Publication**

**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 1: Specification**

**Publishing and copyright information**

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### Summary of pages

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## Foreword

### Publishing information

This part of BS 6920 is published by BSI Standards Limited, under licence from The British Standards Institution, and came into effect on 30 June 2014. It was prepared by Technical Committee EH/6, *Effects of materials on water quality*. A list of organizations represented on this committee can be obtained on request to its secretary.

### Supersession

This part of BS 6920 supersedes BS 6920-1:2000, which is withdrawn.

### Relationship with other publications

The following parts and sections of BS 6920 have been published.

- Part 1: *Specification*;
- Part 2: *Methods of test*:
  - Section 2.1: *Samples for testing*;
  - Section 2.2: *Odour and flavour of water*:
    - Subsection 2.2.1: *General method of test*;
    - Subsection 2.2.2: *Method of testing odours and flavours imparted to water by multi-layered hoses and composite pipes and tubes*;
    - Subsection 2.2.3: *Method of testing odours and flavours imparted to water by hoses for conveying water for food and drink preparation*;
  - Section 2.3: *Appearance of water*;
  - Section 2.4: *Growth of aquatic microorganisms test*;
  - Section 2.5: *The extraction of substances that may be of concern to public health*;
  - Section 2.6: *The extraction of metals*;
- Part 3: *High temperature tests*;
- Part 4: *Method for the GCMS identification of water leachable organic substances*.

A diagram showing the relationship of the various parts and sections of this standard is given in Annex A.

### Information about this document

This is a full revision of the standard, and introduces the following principal changes.

- A statement has been added to the scope that this part of BS 6920 is not applicable to metallic materials and products;
- The definition of the term “product” has been revised (see 3.3);
- The pass/fail requirements of the odour and flavour of water test have been clarified (see Clause 4), and supporting flow diagrams given in a new Annex B;
- Interpretation of the results of the growth of aquatic microorganisms test have been clarified (see Clause 6);
- The fact that some cold water testing is required before high temperature tests are carried out has been clarified (see Clause 9).

Text and figures introduced or altered by Corrigendum No. 1 are indicated in the text by tags C1 C1. Minor editorial changes are not tagged.

### Hazard warnings

**WARNING.** This British Standard calls for the use of substances and/or procedures that can be injurious to health if adequate precautions are not taken.

This British Standard refers only to technical suitability and does not absolve the user from legal obligations relating to health and safety at any stage.

### Use of this document

It has been assumed in the preparation of this part of BS 6920 that the execution of its provisions will be entrusted to appropriately qualified and experienced people, for whose use it has been produced.

### Presentational conventions

The provisions of this standard are presented in roman (i.e. upright) type. Its requirements are expressed in sentences in which the principal auxiliary verb is "shall".

*Commentary, explanation and general informative material is presented in smaller italic type, and does not constitute a normative element.*

Requirements in this standard are drafted in accordance with *Rules for the structure and drafting of UK standards*, sub-clause J.1.1, which states, "Requirements should be expressed using wording such as: 'When tested as described in Annex A, the product shall...'. This means that only those products that are capable of passing the specified test will be deemed to conform to this standard.

### Contractual and legal considerations

This publication does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

### Compliance with a British Standard cannot confer immunity from legal obligations.

However, BS 6920-1 is an appropriate British Standard for conformity to Regulation 4 of the Water Supply (Water Fittings) Regulations 1999 (as amended [5]), and for conformity to part of Regulation 31 of the Water Supply (Water Quality) Regulations 2000 (as amended) [1].

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## 1 Scope

This part of BS 6920 specifies requirements for the suitability of non-metallic (including cementitious) materials and products, and also water fittings and components, pipes and materials used in coating, protection, lining, jointing, sealing and lubrication, for use in contact with either hot or cold water intended for human consumption, with regard to their effect on the quality of the water.

This standard is not applicable to metallic materials and products.

*NOTE Under the requirements of*

- a) *Regulation 31 of the Water Supply (Water Quality) Regulations 2000. Statutory Instrument 2000, No. 3184 (England) [1];*
- b) *Regulation 31 of the Water Supply (Water Quality) Regulations 2010. Welsh Statutory Instrument 2010, No. 994 (W.99) [2];*
- c) *Regulation 27 of the Water Supply (Water Quality)(Scotland) Regulations 2001. Scottish Statutory Instrument 2001, No. 207 [3];*
- d) *Regulation 30 of the Water Supply (Water Quality)(Amendment) Regulations (Northern Ireland) 2009. Statutory Rules of Northern Ireland 2009, No. 246 [4] ;*
- e) *Clause 2, Schedule 2 of the Water Supply (Water Fittings) Regulations 1999. Statutory Instrument 1999, No. 1148 (England and Wales) [5] ;*
- f) *Clause 2, Schedule 2 of the Scottish Water Byelaws 2004 [6];*
- g) *Clause 2, Schedule 2 of the Water Supply (Water Fittings) Regulations (Northern Ireland) 2009. Statutory Rules of Northern Ireland 2009, No. 255 [7];*

*in some cases national authorities or regulators might require specific additional testing to be carried out on extracts from certain types of these materials; interpretation of the results from additional testing is the responsibility of the requesting body.*

## 2 Normative references

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

BS 6920-2.2.1, *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 2: Methods of test – Section 2.2: Odour and flavour of water – Subsection 2.2.1: General method of test*

BS 6920-2.2.2, *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 2: Methods of test – Section 2.2: Odour and flavour of water – Subsection 2.2.2: Method of testing odours and flavours imparted to water by multi-layered hoses, pipes and tubes*

BS 6920-2.2.3, *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 2: Methods of test – Section 2.2: Odour and flavour of water – Subsection 2.2.3: Method of testing odours and flavours imparted to water by hoses for conveying water for food and drink preparation*

BS 6920-2.3, *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 2: Methods of test – Section 2.3: Appearance of water*