

Specification for

Spherical ground joints

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Committees responsible for this British Standard

The preparation of this British Standard was entrusted by the Laboratory Apparatus Standards Committee (LBC/-) to Technical Committee LBC/25 upon which the following bodies were represented:

- British Laboratory Ware Association
- British Lampblown Scientific Glassware Manufacturers' Association Ltd.
- Chemical Industries Association
- Department of Health and Social Security
- Department of Industry (Laboratory of the Government Chemist)
- Glass Manufacturers' Federation
- Institute of Medical Laboratory Sciences
- Institute of Science Technology
- Royal Society of Chemistry

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Foreword

This British Standard has been prepared under the direction of the Laboratory Apparatus Standards Committee. It is a revision of BS 2761:1963, which is withdrawn.

BS 2761 was first published in 1956 under the title “*Spherical ground glass joints*”. It was revised in 1963 to take account of recommendations made at that time by the International Organization for Standardization (ISO), with the aim of ensuring that spherical ground glass joints made in Britain would be interchangeable with those made abroad. The present edition, which has been re-titled, represents a further step towards full international harmonization; its technical requirements are the same as those of ISO 641 “*Laboratory glassware — Interchangeable spherical ground joints*” published by ISO in 1975 and confirmed in 1981, although a marking clause similar to that in the 1963 edition of BS 2761 has been retained as a recommendation in this British Standard.

The principal differences from the previous edition of this standard include the addition of four extra sizes of joint (S7, S64, S76 and S102) and the omission of size 13C as a standard joint. Minor changes have been made to the tolerances for maximum diameter at the narrow end of the ground zone for joints S13, S19, S29 and S35. The maximum external diameter of adjacent tubing remains unchanged, but the bore of the tubing is no longer specified. The previous “blueing test” method recommended for inspecting cups with steel balls has been deleted, although an additional modified version of the leakage test, using gauging balls, has been included in an appendix.

As with previous editions of this standard, the materials for the construction of the joints have not been specified. Whilst glass joints have traditionally been used, the description “glass” has been omitted from the title and from the text because it is the intention that the development of joints made from other materials should not be discouraged, provided that they meet the requirements of this standard.

Two appendices are included for information. Appendix A describes leakage tests which can be used as a simple check on the quality of a joint; for example, when comparing a joint of unknown quality with one which is known to be satisfactory. The results obtained by these methods are not easily reproducible to a high degree of accuracy, nor is comparison easy between different sizes of joints. Although limits for leakage are suggested, neither these nor the associated tests have been included as requirements of the standard. It is considered that the provisions of clauses 3, 4 and 5 ensure adequate resistance to leakage.

Appendix B lists for information the sizes of spherical joints adopted for this British Standard and ISO 641:1975 alongside the corresponding designations in an American Standard.

It is strongly recommended that the joints should be marked as indicated in Appendix C.

A British Standard does not purport to include all the necessary provisions of a contract. Users of British Standards are responsible for their correct application.

Compliance with a British Standard does not of itself confer immunity from legal obligations.

Summary of pages

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This standard has been updated (see copyright date) and may have had amendments incorporated. This will be indicated in the amendment table on the inside front cover.