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# Continuous filament polyester sewing thread suitable for aerospace purposes

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# Committees responsible for this British Standard

The preparation of this British Standard was entrusted to Technical Committee ACE/22, Cords, ropes and sewing threads for aerospace purposes, upon which the following bodies were represented:

- Linen Sewing Thread Manufacturers Association
- Ministry of Defence — UK Defence Standardization
- Society of British Aerospace Companies Ltd.

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The following BSI references relate to work on this British Standard:  
Committee reference ACE/22  
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## Foreword

This British Standard, which has been prepared under the direction of Technical Committee ACE/22, Cords, ropes and sewing threads for aerospace purposes, is one of a series of standards for textiles of a quality suitable for aerospace purposes.

This British Standard supersedes BS F 134:1989 which is withdrawn. This new edition incorporates technical changes but it does not reflect a full review or revision of the standard, which will be undertaken in due course.

This standard includes polyester sewing threads previously defined in Ministry of Defence Specification UK/AID/971 which is withdrawn. The previous edition of this standard differed from UK/AID/971 Issue 1 in that alternative thread constructions were permitted, and additional thread constructions were included. The applicable basic quality requirements specified in BS F 100 were identified.

This new edition incorporates all earlier amendments, updates references to other standards, revises the reference to BS F 100 and improves nomenclature in line with other standards.

The quality assurance authority referred to in this standard is as stated in the contract or order, or the accredited representative of the authority stated as instructed by the prime contractors.

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 does not of itself confer immunity from legal obligations.**

## Summary of pages

This document comprises a front cover, an inside front cover, pages i and ii, pages 1 to 8, an inside back cover and a back cover.

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## 1 Scope

This British Standard specifies requirements for a range of continuous filament polyester sewing threads for aerospace purposes.

NOTE 1 The titles of the publications referred to in this standard are listed on the inside back cover.

NOTE 2 The latest revision of an Aerospace Series standard is indicated by a prefix number.

## 2 General requirements

**2.1** In addition to the requirements specified in clauses **3**, **4**, **5**, **6** and **7** of this standard, the requirements and tests of the latest edition of BS F 100 as specified in Table 1 shall apply.

**Table 1 — General requirements (given in BS F 100)**

| Section of BS F 100                                                                                                                                                                                               | Section title        | Requirements and tests                                                                                                                                                                                                         |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1                                                                                                                                                                                                                 | General              | All requirements.                                                                                                                                                                                                              |
| 2 <sup>a</sup>                                                                                                                                                                                                    | Quality requirements | Requirements for manufacture of sewing threads only.<br>Requirements for dyed textiles except those related to fabric intended for coating.<br>Requirements for freedom from corrosive impurities (see Section 4 of BS F 100). |
| 3                                                                                                                                                                                                                 | Physical tests       | Tests for breaking strength and extension under force.                                                                                                                                                                         |
| 4                                                                                                                                                                                                                 | Chemical tests       | If required by Section 2:<br>— test for conductivity of aqueous extract;<br>— test for pH value of aqueous extract;<br>— test for water soluble chloride;<br>— test for water soluble sulfate.                                 |
| <sup>a</sup> It is not intended that Section 2 tests should be performed on each thread batch. The frequency of these tests should be agreed between the Quality Assurance Authority and the thread manufacturer. |                      |                                                                                                                                                                                                                                |

**2.2** Threads manufactured in accordance with this standard shall conform to the following:

- a) *Freedom from faults.* Threads shall have uniformity of thickness, construction and component ply tension so that there are no visually irregular twist faults. Threads of length per unit mass less than 9 000 m/kg shall not contain thread knots. Threads of length per unit mass greater than 9 000 m/kg shall not contain more than two thread knots per package.
- b) *Length per unit mass.* The length per unit mass of thread shall be determined in accordance with BS EN ISO 2060:1995, option 1.