

Specification for

# Closely woven cotton fabrics (L28 and L34) for aerospace purposes

# Committees responsible for this British Standard

The preparation of this British Standard was entrusted by the Aerospace Standards Policy Committee (ACE/-) to Technical Committee ACE/54, upon which the following bodies were represented:

- British Fabric Association
- British Rubber Manufacturers' Association Ltd.
- British Textile Confederation
- Ministry of Defence
- Society of British Aerospace Companies Limited
- Society of Dyers and Colourists
- Textile Finishers' Association

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## Foreword

This British Standard, prepared under the direction of the Aerospace Standards Policy Committee, is one of a series for textiles of a quality suitable for aerospace purposes. It covers the manufacturing and quality assurance requirements for two closely woven cotton fabrics for use in Aircrew Immersion Coveralls, and supersedes Ministry of Defence specification UK/AID/926 for fabric L34 and Beaufort Air Sea Equipment Ltd. specification BASE 7974 for fabric L28.

The principal changes from these specifications stem from the extremely critical nature of the end use of the fabric. They include close definition of the manufacturing requirements for the yarns, and of the quality assurance requirements to be applied throughout all stages in the manufacture of the fabric, up to and including the purchase of the finished fabric.

The technical requirements in respect of the yarns are given in Imperial units which are those recognised and used throughout European spinning practice.

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

This document comprises a front cover, an inside front cover, pages i and ii, pages 1 to 10, an inside back cover and a back cover.

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.

# Section 1. General

## 1.1 Scope

This British Standard specifies the requirements for two closely woven cotton fabrics (designated L28 and L34), manufactured from especially soft twist yarns, primarily for use in Aircrew Immersion Coveralls as a barrier to water penetration. The fabrics are designed to have good resistance to wind penetration and wetting and, by virtue of the construction of the yarns, to have very good resistance to water penetration when wetted. The fabric is not coated and therefore provides for ventilation in garments.

NOTE 1 The information to be stated by the purchaser in the contract for order is listed in Appendix A.

NOTE 2 The titles of the publications referred to in this standard are listed on the inside back cover.

## 1.2 Definitions

### 1.2.1

#### main contractor

the holder of a Ministry of Defence contract, or a contract requiring Ministry of Defence Quality Assurance oversight, for the supply of either finished fabric or articles made from the finished fabric

### 1.2.2

#### spinner

the organization or individual responsible for the fabrication of the yarn to be used in the fabric

### 1.2.3

#### yarn purchaser

the organization or individual who buys the spun yarn on behalf of the weaver (see 1.2.5)

### 1.2.4

#### accredited test house

a body authorized by the yarn purchaser to test folded yarn on their behalf

### 1.2.5

#### weaver

the organization or individual who undertakes the next stage of the fabric manufacturing process after the yarn has been spun

### 1.2.6

#### finisher

the organization or individual who is responsible for the final stage of the fabric manufacturing process before supply to the purchaser (see 1.2.7)

### 1.2.7

#### purchaser

the purchaser of the finished fabric

NOTE Where a Ministry of Defence contract exists for the supply of the fabric, the purchaser is also the main contractor.

## 1.3 Exchange of information

Early consultation shall be arranged between all parties concerned with the application of this standard to establish which party shall be responsible for which item of documentation. The following information shall be fully documented.

- a) Test reports (see 2.1, 2.2, 2.3, 2.4, 4.4, 4.6.3, Appendix C and Appendix D).
- b) Release records (see 2.5 and 4.7).
- c) Traceability records (see 3.3.2 and 4.6.2).
- d) Colour requirements (see 4.2, Appendix A and Appendix B).
- e) Finished fabric properties requirements (see 4.4 and Appendix A).
- f) Inspection records (see 3.3.3, 3.3.4, 4.6 and Appendix B).

## 1.4 Compliance

### 1.4.1 Spinner

The spinner shall comply with the following clauses of section 2:

- 2.1;
- 2.2;
- 2.3;
- 2.4.1;
- 2.5.1;
- 2.5.3.

### 1.4.2 Yarn purchaser

The yarn purchaser, or an accredited test house on behalf of the yarn purchaser, shall comply with the following clause of section 2:

- 2.4.2.

### 1.4.3 Weaver

The weaver shall comply with the following clauses of section 2 and of section 3:

- 2.5.2;
- 3.1;
- 3.2;
- 3.3.1;
- 3.3.2.

### 1.4.4 Finisher

The finisher shall Comply with section 4 of this standard.

### 1.4.5 Main contractor

The main contractor shall be responsible for ensuring compliance with the following clauses of section 2:

- 3.3.3;
- 3.3.4.