

**Ministry of Defence  
Defence Procurement Agency, ADRP2  
Abbey Wood  
Bristol  
BS34 8JH**

## **OBSOLESCENCE NOTICE**

All DTD specifications were declared obsolescent from 1<sup>st</sup> April 1999. All DTD 900 series approvals also lapsed at that time. The standards will no longer be updated but will be retained as obsolescent documents to provide for the servicing of existing equipment.

### **Further Guidance**

The aim in declaring the specifications obsolescent is to recognise that the documents are not being updated and thus should be used with care by both purchaser and supplier. For example, a specification could contain valid technical information but may also contain type approval clauses that contradict procurement policy and/or use materials that do not comply with environmental legislation. The obsolescent specification can still be used as a basis for a purchase provided that the supplier and purchaser agree suitable changes to the specification within the purchase order/contract.

For the DTD 900 system, each specification has provided an MoD approved material and process. For these items, the declaration of obsolescence will constitute the termination of both the extant MoD approval and the continuing MoD assessment that had underpinned those approvals. Again, the technical content of the document remains valid and can be used by both purchaser and supplier as a basis for a contract but an acceptable (to the parties) approval/assessment procedure would be required.

**Aerospace Material Specification**  
**SILICONE RUBBER FACEPIECES FOR OXYGEN MASKS**

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*NOTE 1. This specification is one of a series issued by the Procurement Executive, Ministry of Defence, either to meet a limited requirement not covered by an existing British Standard (Aerospace Series) or to serve as a basis for inspection of materials, the properties of which are not sufficiently developed to warrant submission to the British Standards Institution for standardization.*

*NOTE 2. Except where otherwise stated, the methods of test shall be as described in British Standard 903 - "Methods of Testing Vulcanized Rubber" - the edition current at the date of tender, contract or order being intended.*

*NOTE 3. This specification calls for the use of substances and/or test procedures that may be injurious to health if adequate precautions are not taken. It refers only to technical suitability and in no way absolves either the supplier or the user from statutory obligations related to health and safety at any stage of manufacture or use. This standard has been devised for the use of the Ministry of Defence and its contractors in the execution of contracts for the Ministry and, subject to the Unfair Contract Terms Act 1977, the Ministry will not be liable in any way whatever (including but without limitation negligence on the part of the Ministry, its servants or agents) where the standard is used for other purposes.*

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**SECTION 1**

**Scope**

1. This specification defines the requirements for facepieces for oxygen masks, made from approved silicone rubber.

**SECTION 2**

**Related Documents**

2. Reference is made in this document to the following:  
BS 903 — Methods of testing vulcanized rubber  
BS F69 — Packaging and identification of vulcanized rubber items

The related documents listed are those applicable at the date of publication of this specification unless otherwise stated. The applicability of the documents must be confirmed by all users of the specification. The Quality Assurance Authority will supply, on request, information concerning any changes that may be necessary due to cancellation, replacement, supersession or amendment of any related document.

**SECTION 3**

**Approval of Rubber Compound**

- 3.1 Only silicone rubber compound approved by Head of Materials and Structures Department, Royal Aircraft Establishment, Farnborough shall be used in the manufacture of the facepieces.
- 3.2 Approval shall be given following satisfactory tests for use of the cured rubber compound in contact with human skin.  
Advice on these tests may be obtained from Head of Materials and Structures Department, RAE.
- 3.3 A list of material approved is given in Appendix 1.  
Further information on amendments to this list will be supplied on application to Head of Materials and Structures Department, RAE.

## SECTION 4

### General Requirements

#### 4.1 Freedom from defects

The oxygen facepieces shall be uniform in quality and condition, clean, smooth and free from foreign matter and imperfections detrimental to their performance.

#### 4.2 Freedom from toxic effects

The facepieces shall not contain any material known to have any injurious effect upon the wearer of the facepiece.

## SECTION 5

### Manufacture and Inspection

#### 5.1 Manufacture

The facepieces shall be made from approved material and processed according to a process schedule agreed between the manufacturer and Director, Aeronautical Quality Assurance Directorate, Harefield House, Harefield, Uxbridge, Middlesex UB9 6BB.

#### 5.2 Inspection

##### 5.2.1 Dimensions

The facepieces shall comply with the dimensions and tolerances given on the relevant drawing quoted in the contract or order.

##### 5.2.2 Physical properties

Samples cut from finished facepieces shall comply with the requirements given in the Table.

The samples shall be cut from positions agreed between the supplier and the Quality Assurance Authority.

TABLE

	Property	Test requirement	Test method
a	Density, Mg/m <sup>3</sup>	Within $\pm 0.05$ of the agreed value	BS 903 Part A1 Method A
b	Hardness, IRHD	45 <sup>+5</sup> -2	BS 903 Part A26
c	Tensile stress at 100% extension, MPa		BS 903 Part A2
	min	0.85	
	max	1.35	
d	Tensile strength, MPa		BS 903 Part A2
	min	8.0	
e	Elongation at break,		BS 903 Part A2
	% min	550	
	% max	750	
f	Tear strength,		
	N min	56	BS 903 Part A3 (1972)

## SECTION 6

### Release Notes

The manufacturer shall state on each release note the part and specification number and date of cure (quarter and year).

## SECTION 7

### Packaging and Identification

Unless otherwise stated on the drawing or in the contract or order, the facepieces shall be packaged and identified in accordance with BS F69.

## APPENDIX I

Rubber compounds approved in accordance with Section 3 of this specification are:

Silicone Rubber Mix No 2012 produced by Camberley Rubber Mouldings Limited, 70 Hawley Lane, Farnborough, Hants and controlled by the inspection schedule AFS 1623 agreed with the Director of Materials Quality Assurance, Royal Arsenal East, Woolwich, London.

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Approved for issue,

D. K. Thomas  
Head of Materials & Structures Department  
Royal Aircraft Establishment  
Farnborough  
Hants.

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