

SPECIFICATION  
FOR  
BATTERY, DRY (LECLANCHÉ), 4.5 V, NO 4, No. STOCK NO 6135-99-910-1143

This Supplement supersedes SUPPLEMENT NO 50 to  
DEF STAN 61 - 3 (PART 1), dated 19 March 1968

1. This Supplement is to be read in conjunction with the General Specification for primary batteries (Leclanché, mercury, and manganese alkaline types) contained in DEF STAN 61 - 3 (PART 1).

2. NOMINAL VOLTAGE

a. Cell.

1.5

b. Battery

4.5

3. DIMENSIONS

Dimensions shall be in accordance with the requirements of the attached drawing.

4. MASS

Mass shall not exceed 4 pounds 8 ounces (2.04 kilograms).

5. MARKINGS

Marking shall be in accordance with the requirements of the General Specification contained in DEF STAN 61 - 3 (PART 1), clause 11. and the attached drawing.

6. CONSTRUCTION

a. Assembly.

- (1) Normally three rectangular shaped cells connected in series and enclosed in an insulating container.
- (2) Inter-cell connections shall be soldered, using wire not thinner than 0.028 in (22 s.w.g.)(0.71 mm).
- (3) The whole assembly shall be blocked securely to prevent internal movement.
- (4) Insulating container shall be coated externally with a smooth and continuous protective film of micro-crystalline wax.

6. b. Cell details.

Zinc thickness shall be not less than 0.028 in (0.71 mm).

c. Terminations.

Brass terminals in accordance with the requirements of the attached drawing.

7. STORAGE AND PERFORMANCE TESTS

a. Allocation of sample batteries.

(1) For Qualification Approval testing.

Shall be in accordance with the requirements of the General Specification contained in DEF STAN 61 - 3 (PART 1), clause 6.b.

(2) For Quality Assurance testing.

Number of sample batteries supplied shall be in accordance with the requirements of the General Specification contained in DEF STAN 61 - 3 (PART 1), clause 14.b. and shall be divided between the tests shown in the table below as follows:

10% Jungle with the balance divided equally between the other four types of storage.

b. Storage conditions and performance requirements.

| TYPE OF STORAGE        | GENERAL SPECIFICATION CLAUSE | STORAGE PERIOD (WEEKS) | MINIMUM DISCHARGE LIFE AFTER STORAGE (HOURS) |
|------------------------|------------------------------|------------------------|--|
| Temperate (Short term) | 17.a.                        | 4                      | 65   |
| Temperate (Long term)  | 17.a.                        | 52                     | 55   |
| ✂ Jungle               | 17.c.                        | 8                      | 60   |
| ∅ Desert               | 17.b.                        | 26                     | 45   |
| Temperate (Spare)      | 18.d.                        | -                      | -  |

Notes:

- ✂ indicates insulation resistance after Jungle storage (General Specification DEF STAN 61 - 3 (PART 1), clause 19.) to be not less than 2 megohms.
- ∅ indicates batteries stored singly.

7. c. Discharge test conditions.

(1) Resistance load.

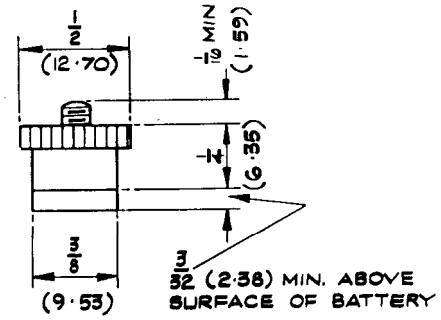
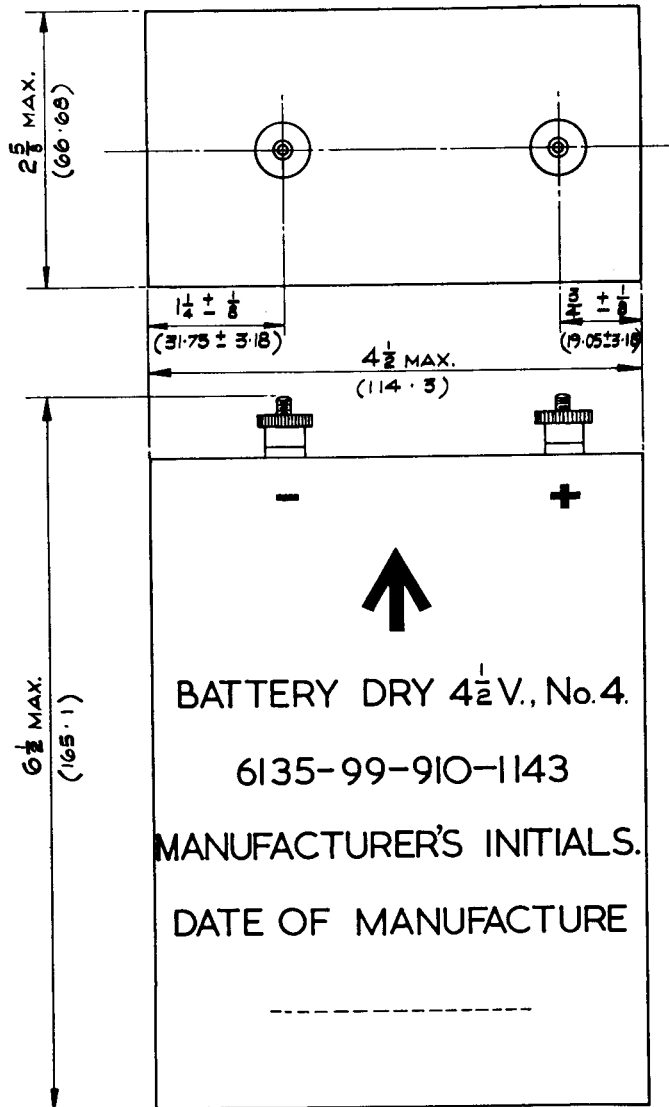
12 ohms.

(2) Discharge cycle.

Continuous discharge.

(3) On-load voltage end-point.

2.4 Volts.



DETAIL OF TERMINALS (2 BA)

NOTE:-

1. ALL DIMENSIONS ARE IN INCHES WITH mm. EQUIVALENTS AND SHALL INCLUDE THICKNESS OF MICRO-CRYSTALLINE WAX COATING.

THIRD ANGLE PROJECTION



# Procurement Executive, Ministry of Defence

Directorate of Standardization

Room 1138, Kentigern House, 65 Brown Street, GLASGOW, G2 8EX

Telephone: 0141-224 2595 (Direct Dialling)

Fax: 0141-224 2503

0141-248 7890 (Switchboard)

Internet e-mail address: t.leaver@dstan.mod.uk

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Your Reference :

Our Reference : D/DStan/11/2

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## **Removal of Product Qualification Approval**

### **IMPORTANT ANNOUNCEMENT**

1. This Standard contains a Product Qualification Approval (PQA) scheme. <sup>i</sup>MOD policy requires that all PQA schemes are removed from Defence Standards called up in contracts placed after 1<sup>st</sup> January 1998.
2. Users of this Standard are to contact the Project Manager (PM), Equipment Support Manager (ESM) or Technical Service Authority (TSA) named in the contract or order, to identify whether there is a continuing need for an approvals scheme.
3. <sup>ii</sup>Product Conformity Certification (PCC) is a risk based process that replaces PQA. Once a risk has been identified PCC can be included as a contract clause. In exceptional circumstances agreement can be sought from AD/Stan for PCC to be included in a Defence Standard.
4. At the next revision of this Standard the PQA scheme will be removed.

T R Leaver  
Head of Standards Programme Management  
Tel: 0141 224 2595 FAX: 0141 224 2503

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<sup>i</sup> Defence Council Instruction (General) 197/97; Quality Temporary Memorandum 5/98; Chief of Defence Procurement Instruction CDPI/TECH/250 (draft)

<sup>ii</sup> PCC is certification that a product meets its specification. When PC is required by the contract, the contractor is responsible for obtaining the necessary PCC. Certification shall be provided from a NAMAS accredited laboratory when appropriate. PCC shall apply where a Risk Assessment has been identified by the PM; ESM or TSA.