



आयुध निर्माणी भंडारा
म्युनिशन्स इंडिया लिमिटेड
कीडकाई
भारत सरकार का उच्चम
रक्षा मंत्रालय
भंडारा, महाराष्ट्र-441 906.

Ordnance Factory
Bhandara
Unit of Munitions India Ltd.
Govt. of India Enterprise,
Ministry of Defence
Bhandara, Maharashtra- 441
906.



दूरभाष सं/PHONE No. 07184-275742-49

Fax : 07184-275242

email:
ofba@ord.gov.in

Quality Assurance Plan

ITEM: CORRUGATED FIBRE BOARD BOX

SPECIFICATION/DRAWING: CORRUGATED FIBRE BOARD BOX (5 PLY) SHOULD BE AS PER DRG.NO. OFBA/RX/393 AND SPECIFICATION NO. BF 1. 69 DTD 15/01/2024

Supplier/ Manufacturer has to submit latest Pre-inspection report/test results from NABL accredited laboratory/ Govt. laboratory for all test requirement as mentioned in above said specification/Supply Order.

1. Firm has to supply the bulk material strictly as per specification/drawing & supply order.
2. Bulk quantity, of the store will be inspected for the following parameter-
Visual inspection- (Quantity 100%) item should be free from any visual defects/damage.

Dimensional Inspection-as per specification/drawing mentioned above & in the Supply Order.

3. All parameters should be as per above mentioned specification/drawing.
4. All other criteria should be as per the specification/drawing mentioned above.
5. Bulk will be accepted on the basis of inspection & test report of NABL accredited laboratory/Govt. laboratory/OFBa laboratory as per specification/Drawing mention above and all other criteria mentioned in supply order/"any attached sheet" with the supply order should be followed strictly.
6. Item should be appropriately packed to ensure that there is no transit damage.
7. If any latest version of the specification/Drawing mention above is found available and included in the supply order then the latest version will be followed.
8. Clearance of advance sample: Firm has to supply advance sample -
 - a. When an item is being developed for the first time.
 - b. When an item is being developed through new source.
 - c. When an item is being supplied by the firm after laps of three years after completion of last Order.

(S.A.Randive)

Divisional officer/QC (process)

For General Manager

पंजीकृत पतालिमिटेड इंडिया म्युनिशन्स : मुख्यालय, द्वितीय तल, न्याति यूनिट्री, गुंजन थिएटर
के पास, नागर मार्ग, येरवदा, पुणे, महाराष्ट्र - 411006

Regd. Office: Munitions India Ltd Headquarters., 2nd Floor, NyatiUnitree, Near Gunjan Theatre, Nagar Road,
Yervada Pune, Maharashtra - 411006दूरभाष सं /PHONE No. 020-67080400, 020-67080401.

Chapter-XII
Item : Corrugated fibre board box(5 ply)

Specification No: *BF 1.69*
Date: *15/01/2024*
Supersede Spn. No.: NA
Date: NA

SPECIFICATION OF CORRUGATED FIBRE BOARD BOX (5 PLY)

CONTROLLED
COPY

Certified For Use

D. H. K.

SPECIFICATION

Chapter--XII(Miscellaneous)
Item : Corrugated fibre board box (5 ply)

Specification No. B.F.No: **BF 1.69**

Date: **15/01/2024**

Supersede Spn. No.: **NA**

Date: **NA**

- 1. Item:** Corrugated fibre board box (5 ply) having handle of cotton webbing dyed olive green with additional 5 ply bottom liner and side sleeves. The box should be Water Repellent from outer side.
- 2. Scope:** This specification prescribes the Quality and General requirements for corrugated fibre board box.
- 3. Material:** Material conforming to IS 2771(Part 1)(Latest) shall be used for making the subject box.
- 4. Dimensions :** The dimensional construction of the box as well as all other components/materials for the construction of the box should be conform to the drawing No. OFBA/RX/393. The holding capacity should be 25.0 Kg.
- 5. End use:** For packing of RDX Compounds for inter/intra factory transportation.
- 6. Quality Requirements:** Any portion of the sample from the consignment shall conform to 6.1 & 6.2.

6.1 Physical Test Parameters: Corrugated Fibre Board is tested for the following.

Sl. No.	Parameters	Specification limits	Test method
1.	No. of Ply	5 (Five) ply	By counting
2.	Board thickness	5 mm (min)	IS 7083(Part-1)- 1973
3.	Inner Dimension (mm) Length x width x Height	Inner box size 400 (±5) x 410 (±5) x 260 (±5)	By physical measurement
	Outer Dimension (mm) Length x width x Height	Outer box size 410 (±5) x 420 (±5) x 270 (±5)	
4.	Type of Flutes	Type- B Narrow Flute	IS 2771(Part-I)- 1990
5.	Box Joint	Strong adhesive OR Stapled Stitches	

6.	Water resistance	Water resistance for outer sides	IS 4006(Part-I)- 1985
7.	Bursting Strength (Side, Bottom, top and ends)	14 Kgf/cm ² (min)	IS 7063 (Part-II)
8.	Water absorption of outer surface (COBB's Test)	155 grams per M ² (Max)	IS 4006(Part-I)- 1985
9.	Drop Test	Should pass the test	Note-A or Method JSG -0102 (Part-II)
10.	FLAP BEND TEST	Should pass the test	Note-B
11.	Stack load test	Should pass the test	Note-C

Note -A

A. Box should be dropped six times (from all four sides, top and bottom) from the height of 1.5 meters after the specified weight (25 kg) of sand / saw dust mixture in polythene bag is kept in box and properly sealed with 75 mm width synthetic adhesive tape .

B. Observation to be noted

C. Requirement: - There should not be any breakages / damages to the box.

Note -B

A. The Flaps should not crack at the crease when bent through 90 degrees in side and 90 degrees outside.

Note - C

A superimposed weight is to be placed on a flat surface resting on the top of the box for period of 24 hrs. The weight should be equivalent to filled boxes which could be stacked on it during the transportation. There should not be any deflection and damage to the box.

6.3 Chemical Test Parameters: Corrugated Fibre Board is tested for the following.

Sl. No.	Parameters	Specification limits	Test method
1.	Moisture content %	9.5 % Max.	IS 1060 (PART-I)(Method-9)
2.	P ^H of water extract	7.5 to 9.5	IS 1060 (PART-I)(Method-10)
3.	Water soluble chlorides %	0.07 % Max.	JSG-0114 (Method -7)
4.	Water soluble sulphates %	0.29 % Max	IS 1060 (PART-II) (Method-18)
5.	Fatty acid content %	0.29 % Max.	IS 1060 (PART-II)(Method-19)
6.	Ash content %	10.0 % Max.	IS 1060 (PART-I)

7. Marking: The boxes shall be marked (printed/stencilled) with the following details such as

a) On Both Side portion of box

RDX/TNT

(i)

Box No. : -----

(ii)

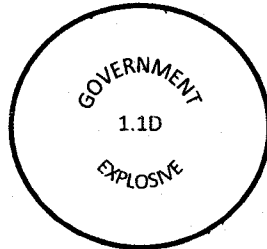
Net Weight - 25.00 Kg.
Tare Weight - 1.50 Kg.
Gross Weight - 26.50 Kg. } (iii)

Lot No. - -----

(iv)

SR NO.	MARKING	MARKING POSITION	EACH SINGLE LETTER SIZE DESCRIPTION IN MM (height)
1	i	Top left side	25.4 (equivalent to 1 inch stencil)
2	ii	Two row below (i) on right side	25.4 (equivalent to 1 inch stencil)
3	iii	Center side	12.7 (equivalent to 1/2 inch stencil)
4	iv	Bottom left side	25.4 (equivalent to 1 inch stencil)

b) On Both front portion of box (Cotton Webbing Handle Side)



Round seal position - Left side of portion
Round seal size - 100 mm dia
Each single letter size (height) - 12.7 mm (equivalent to 1/2 inch stencil)

c) On Top Side of box

To,
G.M.

From,
G.M.

O. F. Bhandara

Each single letter size (height) - 12.7 mm (equivalent to 1/2 inch stencil)

In English letters with black ink/paint.

8. Inspection:

The item shall be offered to QC section of OFBa for inspection and testing for the above.

9. Packing & Issue:

RDX compounds are filled in polythene bags lined cotton bags. The bags so filled are then packed in the Corrugated Fibre Board boxes for issue to the Consignees through explosive van.

Sd/-
15/11

GENERAL MANAGER