



आयुध निर्माणी भंडारा
म्युनिशन्स इंडिया लिमिटेड
कीईकाई
भारत सरकार का उद्यम
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

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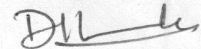
email: ofba.ofb@nic.in

Quality Assurance Plan

ITEM: RECRYASTRALINE HEXAMINE

SPECIFICATION/DRAWING: AS PER BF SPECN. 1.33 DTD 29.09.2023, TOTAL
HEXAMINE CONTENT 99.5%, Ph Max 9.5.

1. Supplier/ Manufacturer has to submit Pre-inspection report/test results from NABL accredited laboratory/ Govt. laboratory for all test requirement as mentioned in above said specification/Supply Order.
2. Firm has to supply the bulk material strictly as per specification/drawing & supply order.
3. 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.
4. All parameters should be as per above mentioned specification/drawing.
5. All other criteria should be as per the specification/drawing mentioned above.
6. 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.
7. Item should be appropriately packed to ensure that there is no transit damage.
8. 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.
9. 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.


(D. M. SHENDE)

Divisional Officer/QC
For General Manager

पंजीकृत पता :म्युनिशन्स इंडिया लिमिटेड मुख्यालय, द्वितीय तल ,न्याति यूनिटी ,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 - 411006 दूरभाष सं /PHONE No. 020-67080400, 020-67080401.

CHAPTER 1 : CHEMICAL

ITEM : HEXAMINE (For new RDX plant)

BF SPECIFICATION No. : 1.33

DATE : 29.09.2023

SUPERCEDES BF SPECIFICATION : 1.33

DATED : 09/05/2003

Technical Requirement :

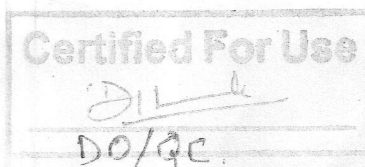
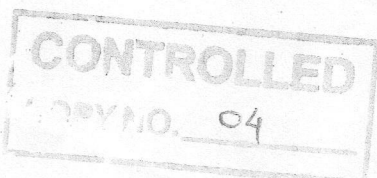
Clause No.	Characteristics	Passing Standard
a)	Volatile matter % by mass.	Max. 0.3
b)	Total Hexamine (Calculated on the basis of volatile matter free material) % by mass.	Min. 99.5.
c)	Matter insoluble in water % by mass.	Max. 0.2
d)	Ash % by mass.	Max. 0.2
e)	Formaldehyde % by mass.	Max. 0.07
f)	Ammonia and Ammonium Compounds calculated as NH ₃ % by mass.	Max. 0.02
g)	Sodium Compounds calculated as Sodium % by mass.	Max. 0.015
h)	Chlorides calculated as Cl % by mass.	Max. 0.02
i)	Sulphates calculated as SO ₄ % by mass.	Max. 0.005
j)	Sieving requirements :	
	i) Retained on 1.18 mm IS sieve % by mass.	Nil
	ii) Passing through 250 micrometer IS sieve % by mass.	Max. 4
k)	pH of aqueous extract.	Max. 9.5.
l)	Sulphated ash % by mass.	Max. 0.2
m)	Organic impurities.	To pass test.
n)	Angle of slip, in degrees.	Max. 45

1. **Scope of Supply** :Supply of item as per material description.

2. **Supplier** : The supplier should be manufacturer of Hexamine having facility for re-crystallisation of hexamine. Manufacturer may authorise his dealer for supply of material.

3. **Transportation** : Transportation of manufactured Hexamine from manufacturer site to store at AC section/O.F.Bhandara is the responsibility of the supplier.

4. **Packing of material** : The manufactured Hexamine crystals are very fragile & weak in nature and prone to breaking of crystals while transporting the material. Hence, packing of material should be such that the material crystals could not be damaged during transportation. Each package shall contain 25 kg net mass of the material.



Contd.....2

The material shall be packed in hermetically sealed polythene bag of thickness $0.127 \text{ mm} \pm 0.005 \text{ mm}$ and the bag be packed inside HDPE lined polywoven bag/PVC bag, then this package be packed in corrugated drums. Each drum shall be sealed. The package shall be sound enough to withstand handling and transit hazards. The inclusion of foreign matter or impurities in any of the package shall render the whole batch/lot/consignment liable to rejection.

5. Quality Assurance & Marking : as per JSS 6810-39 : 2017 (IV Revision).

Note : Test requirement for S.No. (m)-2 as per Table 2 of clause 7.4 of JSS 6810-39 : 2017 (IV Revision) is 5 % max.

6. Unloading of material : Unloading of material at AC section/O.F. Bhandara from supplier transport vehicle is the responsibility of the supplier.

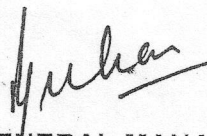
7. Testing of material : Material will be tested at O. F. Bhandara laboratory after reaching the material at AC section/O.F. Bhandara as per JSS 6810-39 : 2017 (IV Revision) test method.

8. The material will be rejected if the material failed to comply in laboratory tests as mentioned above.

9. To collect the rejected material lot and transport back to manufacturer/supplier site will be the responsibility of the supplier.

10. Sieving of material : Sieving of material will be in scope of O.F. Bhandara.

11. Issue of material for production of RDX : The pass material as per clause no.07 above will be sieved in Hexamine plant. Sieved material will be tested as per JSS 6810-39 : 2017 (IV Revision) and after this pass material will be issued for production process.


GENERAL MANAGER
O.F. BHANDARA