Notice Inviting e-Tender

West Bengal Medical Services Corporation Limited
Swasthya Bhawan II,
GN-29, Salt Lake, Sector-V
Kolkata-700091

Phone No (033) 40340307 / 40340308
E mail: procurement@wbmsc.gov.in

Supply of 5% Alphacypermethrin WP
(Submission of Bid through *online*)

Bid Reference No.: WBMSCL / NIT-797/ 2026	Dated 28.09.2026

(2nd call for bid ref. no. WBMSCL/NIT-476/2026 dated 09.06.2026)

1. West Bengal Medical Services Corporation Limited (WBMSCL) has been requested by the Government of West Bengal to procure on their behalf 5% Alphacypermethrin WP to be supplied to the various consignees of West Bengal.

2. WBMSCL hereby invites bids from eligible and qualified Tenderers for the supply of the item as per Schedule of Requirement.

3. Intending Tenderer may download the tender document from the e-tender portal of Govt. of West Bengal at tenders.wb.gov.in and the website of WBMSCL at www.wbmsc.gov.in. The submission of bids should only be through online at tenders.wb.gov.in. Earnest money to be drawn in favour of 'West Bengal Medical Services Corporation Limited' through online issued from any scheduled bank payable at Kolkata.

4. Non statutory documents, Bid – A, Bid – B & Bid – C are to be submitted concurrently.

5. All the statutory rules of the land will be applicable.

Managing Director

Table for Important Dates

Sl.	Items	Date(s)
1.	Date of uploading of N.I.T. Documents (online) / Date of Issue / Published on	01.10.2026
2.	Documents download start date (Online)	01.10.2026
3.	Date of **Pre Bid Meeting** with the intending tenderers (optional) in the Conference Hall of **West Bengal Medical Services Corporation Limited**	06.10.2026 at 11.30 am
4.	Bid submission start date (On line)	14.10.2026
5.	**Bid submission closing (On line)** Bid submission includes: i) Non statutory documents to be submitted under My Space (Each sub-category item should be in multiple page single PDF file) ii) BID – A (Should be in multiple page single PDF file) iii) BID – B (Should be in multiple page single PDF file) iv) BID – C (BOQ and the statement of Breakup of Duties and Taxes & Prices of Consumables, spares etc.) **Detailed list of documents annexed at Section V Check-List Form** Non-statutory document (document uploaded in My Space), Bid – A & Bid – B constitute the technical bid and Bid – C is the financial bid. *Any wrong or misleading information provided by the Tenderer during submission of bids shall lead to summary cancellation of bid and may lead to blacklisting in WBMSCL for at least 3 years.* **Each scanned documents should have an index page indicating the name of the documents enclosed with page number.**	24.10.2026 up to 3:00 PM

6.	**Last date of submission of hard copy (<u>optional</u>)** a) Earnest Money Deposit submission/exemption document b) Hard copies of the documents uploaded in e-tender during bid submission sequentially as per the checklist **Form 1. No BOQ to be submitted in hard copy.** c) Copy of acknowledgement generated by e-tender portal against the documents uploaded during bid submission. **N.B.:** 1) All the above documents are to be submitted at the registered office of WBMSCL. **It is essential that, all documents online/ hard copy are to be placed before the Committee and arranged in the same sequence as given in the Check List (Form 1). All the documents should be appropriately flagged.**	27.10.2026 up to 3:00 PM

7.	Bid opening date for Technical Proposals **(Online)** (Bid A & B)	27.10.2026 after 3:00 PM
8.	Bidders to remain present at WBMSCL, Kolkata office with sample	To be notified later
10.	Submission of non-statutory wanting document (if any)	To be notified later
11.	Opening of Financial Bid **(Online)**	To be notified later

Section I: Instruction to Tenderers

A. Important information at a glance

(The item suffixed by "E" in bracket indicates Eligibility Criteria for a bidder)

1. Tender Schedule Details

Synthetic Pyrethroid: 5% Alphacypermethrin WP	**Estimated value (INR)**
Qty. 79048 Kg	Rs. 1,81,60,000/-

2. Tender Fees: Exempted

3. Earnest Money Deposit (EMD) (E)

Item	Amount in Lakh (Rs.)	Mode of Payment
Synthetic Pyrethroid: 5% Alphacypermethrin WP	4.5	Online Payment

4. Annual Turnover requirements: (E)

5% Alphacypermethrin WP
The bidder should have annual sales turnover of minimum **Rs. 2 (two) crores** on an average of three financial years (2022- 2023, 2023-2024 & 2024-2025) as per the Audited Accounts of the Organization.

5. (a) Delivery schedule:

Delivery Status	5% Alphacypermethrin WP
Completion of 100%	Within 60 Days

Note: The delivery schedule will be effective from as per the Award of Work.

(b) Payment Terms

5% Alphacypermethrin WP
I. General Terms (i) The payment to Tenderer will be made under Delivered Duty Paid contract. (ii) The Tenderers should only quote in INR. **II. Payment terms for Manufacturer / Indian Distributor** A. 80 % of the Gross Price of the Item shall be paid within 30 days of submission of invoices along with delivery challans and Consignee Receipt Certificate (CRC). The goods supplied (as per supply schedule) must include the batch analysis report. B. Remaining 20% of the Gross Price of the Item shall be paid after WBMSCL has satisfied itself that the goods have been delivered in compliance with the requirements of the tender including packaging and labeling norms as per provisions in the tender but not beyond 60 days of raising of bills. **Note:** Submission of required Performance Bank Guarantee is mandatory for the processing of any Payment. **Gross Price of Item** includes value of goods, accessories & ancillaries and taxes, duties, freight charges, insurance, supply up to the consignee (installation, commissioning, end user training as many number of times as required during the period of warranty) and any other charges as applicable excluding GST. Applicable GST will be paid extra.

6. Performance Security (PS)

(In the form of unconditional and irrevocable Bank Guarantee)

5% Alphacypermethrin WP
The Performance Bank Guarantee of 10% of the Bid value shall remain valid up to not less than 365 days after the last day of supply with additional 30 days for claim period.

7. Who can Bid (E)

a) Manufacturing Company or its subsidiary in India
b) Manufacturer's Authorized Distributor / Dealer

8. Eligible Tenderers:

8.1

5% Alphacypermethrin WP
Tenderer/manufacturer should have manufactured and supplied 50% of the tendered quantity of 5% Alphacypermethrin WP at least 2 (two) State Government/Government Organizations / Municipality/Gram Panchayet in the last 3 (three) financial years.

8.2 **A Tenderer shall not have a conflict of interest**. All Tenderers found to have conflict of interest shall be disqualified. Tenderers may be considered to have a conflict of interest with one or more parties in this bidding process if he submits more than one bid in this bidding process either directly or through any subsidiaries or any associates of any organization.

8.3 A Tenderer that is under a declaration of ineligibility by WBMSCL in accordance with Instructions to Tenderers at the date of contract award, shall be disqualified. Tenderers shall not be eligible to submit a bid when at the time of bid submission:

- Suppliers are already suspended by WBMSCL; or,
- Suppliers are suspended/blacklisted by the Government of West Bengal or Central Government or any other State Government or WBMSCL,
- Suppliers have been declared ineligible by Government of West Bengal or Central Government or any other State Government or WBMSCL.

8.4. Restrictions under Rule 144(xi) of the general Financial Rules(GFRs),2017:As per office memorandum from the Ministry of Finance, Govt. of India the following clause will be effective from dated- 08.02.2021 where has been clearly mentioned that, "in case a bidder has proposed to supply finished goods procured directly/indirectly from the vendors from the countries sharing land border with India, such vendor will be required to be registered with the competent Authority."

8.5 **Preference for S.S.I. units registered in West Bengal & PSUs in West Bengal:**

Preference will be given to the S.S.I. units registered in West Bengal & PSUs in West Bengal and State Based Other Manufacturers as per West Bengal Financial Rule incorporated under notification No. 10500-F dated 19.11.04 as amended hereafter.

Exemption from payment of earnest money for tenders, payment of security deposits, if selected and price preference for S.S.I. units registered in West Bengal & PSUs in West Bengal will be given as per West Bengal Financial Rule incorporated under Finance Department notification No. 10500-F, dated 19.11.2004 read with its amendments.

Bidders should upload valid registration certificate / document issued by Government authority in support, if aforesaid exemption has been applied for. Any bid without EMD is liable to be cancelled, if requisite document in support of availing such exemption(s) is not submitted.

Note1: The Tenderers, who have downloaded the bid documents, shall be solely responsible for checking these websites for any amendment, addendum issued subsequently to the bid document and takes into consideration the same while preparing and submitting the bids.

Bids will be opened in the presence of Tenderers' representative who chooses to attend on the specified date and time. However, opening of bids will not be stopped for absence of any bidder or his authorized representative at the notified time.

B. General

1. Scope of Bid

1.1 The type of goods and related services to be purchased is: **Supply of 5% Alphacypermethrin WP** as per the Schedule of Requirements.

2. Source of Funds

2.1 Funds to be received from the **Department of H & FW,** for the procurement.

3. Fraud and Corruption

3.1 It is WBMSCL policy to require that Tenderers, suppliers and contractors and their subcontractors under WBMSCL contracts, observe the highest standard of ethics during the procurement and execution of such contracts. In pursuance of this policy, WBMSCL:

(a) Defines, for the purposes of this provision, the terms set forth below as follows:

(i) Bribery is the act of unduly offering, giving, receiving or soliciting anything of value to influence the process of procuring goods or services, or executing contracts;

(ii) Extortion or coercion is the act of attempting to influence the process of procuring goods or services, or executing contracts by means of threat of injury to person, property or reputation;

(iii) Fraud is the misrepresentation of information or facts for the purpose of influencing the process of procuring goods or services, or executing the contracts, to the detriment of WBMSCL or other participants;

(iv) Collusion is the agreement between Tenderers designed to result in bids at artificial prices that are not competitive.

(b) Will reject a proposal to award a contract if it determines that a vendor recommended for award has engaged in corrupt practices in competing for the contract in question;

(c) Will declare a vendor ineligible, either indefinitely or for a stated period of time, to become a WBMSCL registered Vendor if it at any time determines that the vendor has engaged in corrupt practices in competing for or in executing a WBMSCL contract;

(d) Will cancel or terminate a contract if it determines that a vendor has engaged in corrupt practices in competing for or in executing a WBMSCL contract;

(e) Will normally requires a WBMSCL vendor to allow WBMSCL, or any person that WBMSCL may designate, to inspect or carry out audits of the vendor's accounting records and financial statements in connection with the contract.

3.2 Any vendor participating in WBMSCL's procurement activities, shall facilitate to WBMSCL personnel upon first request, all documents, records and other elements needed by WBMSCL to investigate the allegations of misconduct by either vendors or any other party to the procurement activities. The absence of such cooperation may be sufficient grounds for the debarment of the vendor from WBMSCL vendor roster and may lead to suspension following review by WBMSCL Vendor Review Committee.

3.3 It is required that Vendors, their subsidiaries, agents, intermediaries and principals cooperate with WBMSCL Internal Audit Group as well as with other investigations authorized by WBMSCL or by the Government of West Bengal or the Central Government as and when required. Such cooperation shall include, but not be limited to, the following: access to all employees, representatives, agents and assignees of the vendor; as well as production of all documents requested, including financial records. Failure to fully cooperate with investigations will be considered sufficient grounds to allow WBMSCL to repudiate and

terminate the contract and to debar and remove the supplier from WBMSCL's list of registered vendors.

4. Eligible goods and related services

4.1 All the goods and related services to be supplied under the Contract may have their origin in any country.

4.2 For purposes of this Clause, the term "origin" means the country where the goods have been mined, grown, cultivated, produced, manufactured or processed; or, through manufacture, processing, or assembly, another commercially recognized article results that differs substantially in its basic characteristics from its components.

C. Contents of Bidding Documents

1. Sections of Bidding Documents

1.1 The Bidding Documents consist of:

- Section I. Instructions to Tenderers
- Section II. General Conditions for Goods (GCG)
- Section III. Special Conditions of Contract (SCC)
- Section IV. Schedule of Requirements
- Section V. Bidding Forms
- Section VI. Contract Forms

1.2 The Tenderer is expected to examine all instructions, forms, terms and specifications in the Bidding Documents. Failure to furnish all information or documentation required by the Bidding. Documents may result in the rejection of the bid.

1.3 Tenderers are cautioned to read the specifications carefully (see Section IV - Schedule of Requirements), as there may be special requirements. The technical specifications presented herein are not to be construed as defining a particular manufacturer's product. Tenderers are encouraged to advise WBMSCL, if they disagree.

1.4 The specifications are the minimum requirements for the products. Products offered must meet or exceed requirements mentioned in technical specifications. The products shall conform in strength, quality and workmanship to the accepted standards of the relevant industry. Modifications of or additions to basic standard products of less size or capability to meet these requirements will not be acceptable.

2. Clarification of Bid Document

2.1 A prospective Tenderer requiring any clarification of the Bidding Documents shall contact WBMSCL in writing at ***procurement@wbmsc.gov.in***

3. Amendment of Bid Document

3.1 At any time prior to the deadline for submission of bids, WBMSCL may amend the Bid Document by issuing amendment to be uploaded in the e-tender portal & website of WBMSCL.

3.2 To give prospective Tenderers reasonable time in which to take an amendment into account in preparing their bids, WBMSCL may, at its discretion, extend the deadline for the submission of bids.

D. Preparation of Bids

1. Tenderers are to prepare and submit the following:

   i) BID – A (Should be in multiple page single PDF file)
   ii) BID – B (Should be in multiple page single PDF file)
   iii) BID – C (BOQ), the Statement of Breakup of Taxes & Duties

   Details are given in "Submission and Opening of Bids"

2. **Cost of Bidding**
   The Tenderer shall bear all costs associated with the preparation and submission of its bid.

3. **Language of Bid**
   The Bid, as well as all correspondence and documents relating to the bid exchanged by the Tenderer and WBMSCL, shall be written in the English language. Supporting documents and printed literature that are part of the Bid, if submitted in any other language provided they are accompanied by an accurate translation of the relevant passages into English and duly authenticated.

4. **Alternative Bids**
   Alternative Bids will not be accepted.

5. **Bid Prices**
   5.1 The prices in the BOQ shall conform to the requirements as specified in the tender.
   5.2 The Incoterms shall be governed by the rules prescribed in the Incoterms 2010, published by The International Chamber of Commerce.
   5.3 Prices quoted by the Tenderer shall be fixed during the Tenderer's performance of the Contract and not subject to variation on any account.

6. **Currencies of Bid**
   The Tenderer shall quote in INR only.

7. **Documents Establishing the Conformity of the Goods and Related Services**
   To establish the conformity of the goods and related services to the Bidding Documents, the Tenderer shall furnish as part of its Bid the documentary evidence that the Goods conform to the technical specifications and standards specified in Section IV, Schedule of Requirements.

8. **Documents Establishing the Qualifications of the Tenderer**
   As per Form 1: Check-List of Section V of the bid document.

9. **Period of validity of Bids**

9.1 Bids shall remain valid for a period of **2 years** from the date of opening of financial bid. A bid valid for a shorter period than specified in previous lines shall be rejected by WBMSCL as non responsive.

9.2 In exceptional circumstances, prior to the expiration of the bid validity period, WBMSCL may request Tenderer to extend the period of validity of their bids and EMD. In the event of the request for such extension beyond bid validity period, the bidder may or may not

accept such request. In case, the bidder refuses to accept the request, the EMD of the bidder shall not be forfeited.

10. Period of validity of the bid price:

The bid price shall remain valid for a period of **2 (two)** years from the date of signing of the contract which may be extended for another 6 (six) months.

11. Earnest Money Deposit (EMD):

11.1 The EMD shall be paid in favour of "**West Bengal Medical Services Corporation Limited**", **GN-29, Swasthya Bhawan II, Sec-V, Salt Lake, Kolkata- 700091** in the amount as provided in the **Schedule of Requirements** *and* denominated in INR.

11.2 **Any bid not accompanied by a substantially responsive EMD in accordance with Instructions to Tenderers shall be rejected by** WBMSCL **as non-responsive.**

11.3 The EMD of unsuccessful Tenderers shall be returned as promptly as possible upon the successful Tenderer's furnishing of the Performance Security pursuant to Instructions to Tenderers

11.4 The EMD may be forfeited:

(a) if a Tenderer withdraws its bid during the period of bid validity specified by the Tenderer on the Bid Submission Form, except as provided in Instructions to Tenderers; or

(b) if the successful Tenderer fails to:

(i) sign the Contract in accordance with Instructions to Tenderers;

(ii) furnish a Performance Security in accordance with Instructions to Tenderers ;

12. Signing of Bid – The bid document should be digitally signed and uploaded on the E-tender portal.

13. Withdrawal, Substitution and Modification of Bids

13.1 The bid once submitted cannot be withdrawn but prior to the deadline prescribed for submission of bids, a Tenderer may substitute, or modify its Bid after it has been submitted.

13.2 The objective of this bid is to ensure supply of best quality item at the most competitive price. If at any stage of the bidding, including at the stage of financial evaluation, it appears that the tendered rate is artificially hiked or is much lower compared to the prevailing market price and available rates of similar or identical composition with the government, WBMSCL reserves the right to cancel the bids.

14. Confidentiality

Any effort by a Tenderer to influence WBMSCL in the examination, evaluation, comparison of the bids or contract award decisions may result in the rejection of its Bid.

Notwithstanding Instructions to Tenderers from the time of bid opening to the time of Contract Award, if any Tenderer wishes to contact WBMSCL on any matter related to the bidding process, it should do so in writing.

E. Submission and Opening of Bids

1. The following are to be submitted:

The following are to be submitted: As per the **Form 1**

(a) BID – A (Should be in multiple page single PDF file)

1. Online EMD submission document generated from the e-Procurement system or EMD exemption documents, as the case may be.

2. Declaration of the bidder on letter head that "We agree to submit a copy of the Tender Documents and its Amendments and Addendums thereto duly signed by us in all pages with our seal/ rubber stamp affixed thereto, in token of acceptance thereof."

(b) BID – B (Should be in multiple page single PDF file)

Rest of the documents sequentially as per the **Form 1, Section V**.

Bid – A and Bid – B constitute the technical bid.

iii) BID – C [Bill of Quantity (BOQ), the Statement of Breakup of Duties and Taxes]

BOQ shall contain the financial quotes in respect of **Basic Price of Item.**
Basic Price (BP): includes value of goods/item, accessories, freight/door delivery charges, supply, demonstration, end user training and any other charges as applicable excluding GST. Applicable GST will be paid extra.

The Tenderer should upload Form 8 [Breakup for Duties and Taxes (as per of Sec V) for item] in PDF in addition to.

Comparison of Financial Bids for the SCHEDULES would be based on the quoted Basic Price. The rates quoted shall be firm and no variation will be allowed during the period of contract.

Detailed list of documents annexed at Form 1 Check-List Form, Section V

N.B.

a) Any wrong or misleading information provided by the Tenderer during submission of bids may lead to summary cancellation of bid, blacklisting in WBMSCL for at least 5 years and forfeiture of EMD.

b) Each scanned documents should have an index page indicating the name of the documents enclosed with Page no.

c) The Earnest Money will be refunded within 15 days after finalization of the tender and / or submission of Performance Bank Guarantee.

F. Evaluation and Comparison of Bids

1. Evaluation of Bids

(A) Technical Evaluation

During the tender evaluation process the **Bid – A** & **Bid – B** constituting the technical bid will be opened first and evaluated. The determination of Technical qualification status of a bidder will be based on the following:

i) **Scrutiny of Form 2 (NIT Acceptance Form) duly notarized**

ii) **Scrutiny of documentary evidence as per Form 1: Check-list, Section V of Bid document submitted by the Tenderers**

iii) **Evaluation of Spec indicator:** Bidders will have to arrange for a functional demonstration of the offered item on the notified date. The evaluation of the spec indicator will be made based on the reports of the functional demonstration of the items. The functional demonstration (i.e. onsite/offsite) of the item is purely at the discretion of the Technical Bid Evaluation Committee and its input shall be treated as only corroborative in nature and will not be a substitute for technical evaluation of the document submitted along with the bid. The decision of the Technical Committee in this regard will be final.

Bidder has to comply with all Essential parameters of the technical specifications except deviation(s) which will be considered minor and acceptable by the team of experts to be engaged by WBMSCL to take working / functional demonstration of the offered items.

A bidder will be considered technically qualified if,

1. **Comply with i), ii) & iii) above**

B. Financial Evaluation

Financial Bids (Bid - C) of the technically qualified Bidders would only be opened. **Comparison of Financial Bids would be based on the sum of 'a' & 'b' taken together as mentioned in "Submission and Opening of Bids" quoted by the tenderers.**

THE DECISION OF THE WBMSCL AUTHORITY WILL BE FINAL AND BINDING IN THIS MATTER.

2. Responsiveness of Bids

2.1 WBMSCL's determination of a bid's responsiveness is to be based on the contents of the bid itself.

2.2 A substantially responsive Bid is one that conforms to all the terms, conditions and specifications of the Bidding Documents without material deviation, reservation, or omission. A material deviation, reservation, or omission is one that:

(a) Affects in any substantial way the scope, quality, or performance of the goods and related services specified in the Contract; or
(b) Limits in any substantial way, inconsistent with the Bidding Documents, **WBMSCL**'s rights or the Tenderer's obligations under the Contract; or
(c) If rectified would unfairly affect the competitive position of other Tenderers presenting substantially responsive bids.

WBMSCL considers material deviation to include but not to be limited to the following situations:

(d) During technical evaluation of bids (verification of formal criteria):
- Lack of proper bid securities in terms of change in the wording (not consistent with the prescribed format), amount or validity period.
- Absence of bid form, change in the wording (not consistent with the prescribed format) or lack of signature in the key portions of the bid form,
- The Tenderer does not accept important Contract conditions, i.e. related to Performance Security, Warranty, Force Majeure, Applicable Law, Delivery Schedule, Payment Terms, Limitation of Liability, etc.
- Specifications of the item quoted vary in one or more significant respect(s) from the minimum required Technical Specifications.

2.3 If a bid is not substantially responsive to the Bidding Documents, it shall be rejected by WBMSCL

3. Examination of Terms and Conditions and Technical Evaluation

3.1 WBMSCL shall examine the Bid to confirm that it does not contain material deviation or reservation related to the conditions and requirements specified in the GCC of Section II, SCC of Section III and in the Schedule of Requirements of Section IV.

3.2 If, after the examination of the terms and conditions and the technical evaluation, WBMSCL determines that the Bid is not substantially responsive in accordance with Instructions to Tenderers, it shall reject the Bid.

4. Domestic Preference

Companies based and manufacturing in India shall not be a factor in bid evaluation.

5. Financial evaluation

The financial bids of only those bidders who qualify in the technical bids will be opened.

6. WBMSCL's Right to Accept Any Bid and to Reject Any or All Bids

WBMSCL reserves the right to accept or reject any bid and to annul the bidding process and reject all bids at any time prior to contract award, without thereby incurring any liability to Tenderers.

G. Award of Contract

1. Award Criteria

1.1 In the event of a Contract award, WBMSCL shall award the Contract to the Tenderer whose offer has been determined to be the lowest evaluated bid substantially responsive to the Bidding Documents, provided further that the Tenderer is determined to be qualified to perform the Contract satisfactorily.

1.2 Before the award of Contract, WBMSCL may inspect the manufacturing facilities of the lowest evaluated responsive Tenderer to assess his capability to successfully perform the Contract as per the terms and conditions specified in the NIT.

2. WBMSCL's right to vary quantities

2.1 WBMSCL reserves the right to increase the quantity in case of need/ or to decrease the quantity of goods and related services, indefinitely as originally specified in section I.A. 1 and section IV, Schedule of requirements, without any change in the unit prices or other terms and conditions of the Bid Documents.

3. Publication of Award of Contract

3.1 WBMSCL shall publish the Award of Contract in e-tender portal and its website wbtenders.gov.in, wbmsc.gov.in, wbhealth.gov.in.

4. Signing of Contract

4.1 Prior to the expiry of the period of bid validity, WBMSCL shall issue Award of Contract (AOC) to the successful Tenderer and Special Conditions for Goods, if any.

4.2 Within *14 (fourteen)* days of receipt of the AOC, the successful Tenderer shall submit the required value of Performance Security in full or in parts in the event of a staggered supply as decided by WBMSCL.

5. Performance Security

5.1 Within *14* days of receipt of the AOC from WBMSCL, the successful Tenderer, if required, shall furnish the Performance Security in full or in parts in the event of a staggered supply as decided by WBMSCL in accordance with the GCC, using for that purpose the Performance Security Form included in Section VI, Contract forms, or another Form acceptable to WBMSCL. WBMSCL shall promptly discharge the Bid Securities of the unsuccessful Tenderers pursuant to Instructions to Tenderers.

6. Failure of the successful Tenderer to submit the above-mentioned Performance Security in full or in parts in the event of a staggered supply as decided by WBMSCL shall constitute sufficient grounds for the annulment of the award and forfeiture of the EMD.

Note: - *Working demonstration of all the offered goods within India shall be required to be arranged by the Tenderer before the Bid Evaluation Committee for technical evaluation, as and when requested to do so by the Technical Bid Evaluation Committee prior to the opening of the financial bids. The cost incurred for the tour of the members of technical bid evaluation will be entirely borne by WBMSCL. Choosing of site for onsite physical demonstration from the list of installations submitted by a bidder / the institutes who have issued satisfactory certificate to the bidder shall be on the discretion of WBMSCL.*

Section II: General Conditions of Contract (GCC)

In the event of an order, and any dispute arising out of the same, the WBMSCL General Conditions of Contract will apply as under

1. LEGAL STATUS OF THE PARTIES:

WBMSCL and the Vendor shall respectively be referred to as "FIRST PARTY" & "SECOND PARTY" hereunder and each Party acknowledges and agrees that:

1.1. Nothing contained in or relating to the contract shall be construed as establishing or creating between the Parties the relationship of employer and employee or of principal and agent. The officials, representatives, employees, or subcontractors of each of the Parties shall not be considered in any respect as being the employees or agents of the other Party and each Party shall be solely responsible for all claims arising out of or relating to its engagement of such persons or entities and shall be treated responsible for the actions undertaken by respective parties.

1.2. If the Tenderer is a joint venture (JV) or consortium, all of the Parties shall be jointly and severally liable to WBMSCL for the fulfilment of the provisions of the Contract and shall designate one party to act as a leader with authority to bind the joint venture or consortium even though the Award of Work will be issued in the name of JV and all payment will be made in the name of JV. In case of Consortium, the Award of Work will be issued in the name of the Lead Partner of the Consortium and all payment will be made in the name of the Lead Partner. The composition or the constitution of joint venture or consortium shall not be amended and /or altered without the express prior consent of WBMSCL.

2. DEFINITIONS:

2.1 **GOODS**: Goods which term and expression unless excluded by or repugnant to the context would include, are hereinafter deemed to include, without limitation, such medicines, raw materials, components, intermediate products and products which the Tenderer is required to supply pursuant to the Purchase Order or Special Conditions of this Contract to which these General Conditions are related to attached.

2.2 **Services**: Services which term and expression unless excluded by or repugnant to the context would include are hereinafter deemed to include services ancillary to the supply of the Goods including, without limitation, transportation and supply at the point of consignee and such other obligations as required under this Contract and including such other obligations.

2.3 **TRADE TERMS**: Whenever an International Commercial Term (Inco term) is used in this Contract it shall be interpreted in accordance with the Inco terms, 2010 subject to the judicial interpretation followed in India.

3. CONTRACT PRICE:

Prices charged by the Tenderer for the Goods supplied and the related services performed under the Contract shall not vary from the prices quoted by the Tenderer in its bid, no exception shall be allowed with the exception of any price adjustment unless expressly authorized in writing by WBMSCL.

4. PENAL PROVISIONS UNDER THE CONTRACT:

WBMSCL will monitor and adjudge the conduct and performance of the maintain Tenderer history for all Tenderers. The penal norms as described in clause no. 12 below will follow in general, in case of Tenderers who fail to abide by the contract norms. The penal action for repeated offence by the same Tenderer will attract penal provision as

stated, even if the offence is made against the same contract or against a different contract period of the previous first contract.

In case the item is found to be spurious, mislabelled, misbranded, sub- standard, recycled or a combination of any of these on first verification by WBMSCL, the sample may be sent to any Government Laboratory / National Accreditation Board for Testing and Calibration Laboratories (NABL) accredited laboratories.

5. ACCEPTANCE OF GOODS:

5.1 Under no circumstances shall WBMSCL be required to accept any Goods (including packaging and labelling of goods) that do not conform to the specifications of requirements of the Contract.

5.2 Manufacturer details with production batch and expiry details must be printed on the test box along with shelf life after opening of the container.

5.3 The packaging/labelling design must be approved by WBMSCL before the production.

5.4.The bidder may require to submit quality test report for all the consignment batch(s) from NABL accredited laboratory, in addition to the routine/in house batch analysis certificate to WBMSCL to get the final dispatch clearance.

6. TITLE:

Unless otherwise expressly provided in the Contract, title in and to the Goods shall pass from the Tenderer to WBMSCL upon delivery of the Goods and their acceptance by WBMSCL in accordance with the requirements of the Contract.

7. WARRANTY OF GOODS:

Without limitation of any other warranties stated in or arising under the Contract, the Vendor warrants and represents that:

7.1 The Goods, including all packaging and packing thereof, conform to the specifications of the Contract, are fit for the purposes for which such Goods are ordinarily used and for the purposes expressly made known in writing by WBMSCL to the Tenderer, and shall be of even quality, free from faults and defects in material and manufacture under normal use in the conditions prevailing in the country of final destination;

7.2 The Goods are of the quality, quantity and description required in the Contract;

7.3 The Goods are free from any right of claim by any third-party and unencumbered by any title including incidentals or other rights, including any liens or security interests and claims of infringement of any intellectual property rights, including, but not limited to, patents, copyright and trade secrets.

8. INDEMNIFICATION:

The Tenderer shall indemnify, defend and hold the WBMSCL, the DoHFW and the Government agencies harmless against any or all proceedings, actions and third party claims arising out of a breach by the Tenderer of any of its obligations under the contract.

This indemnity shall be limited in respect of making harmless to the WBMSCL, the DoHFW and the Government agencies.

9. CHANGES:

WBMSCL reserves the right to increase the quantity in case of need/ or to decrease the quantity of goods and related services, indefinitely as originally specified in section I.A. 1 and section IV, Schedule of requirements, without any change in the unit prices or other terms and conditions of the Bid Documents.

10. TERMINATION FOR CONVENIENCE:

10.1 WBMSCL may, upon notice to the Tenderer, terminate this Contract, in whole or in part, at any time for its convenience. The notice of termination shall state that termination is for WBMSCL's convenience, the extent to which performance of the Vendor under the Contract is terminated and the date upon which such termination becomes effective.

10.2 In the event of Termination for Convenience, no payment shall be due from WBMSCL to the Tenderer except for Goods satisfactorily delivered and for the cost of such necessary work as WBMSCL may request the Tenderer to complete.

11. TERMINATION FOR DEFAULT:

11.1 WBMSCL, without prejudice to any other remedy for breach of Contract, by written notice of default sent to the Vendor, may terminate the Contract, in whole or in part if:

11.1.1 The Vendor fails to deliver any or all of the Goods within the period specified in the Contract:

11.1.2 The Vendor fails to perform any other obligation under the Contract;

11.1.3 The Vendor, in the judgment of WBMSCL, has engaged in fraud and corruption, in competing for or in executing the present Contract:

11.1.4 The Vendor attempts to offer any direct or indirect benefit arising from or related to the performance of the Contract or the award there of to any representative, official, employee or other agent of WBMSCL or any organization of Health & Family Welfare Department, Government of West Bengal:

11.1.5 The Vendor is adjudged bankrupt, or is liquidated, or becomes insolvent, applies for moratorium or stay on any payment or repayment obligations, or applies to be declared insolvent;

11.1.6 WBMSCL reasonably determines that the Vendor has become subject to a materially adverse change in its financial condition that threatens to endanger or otherwise substantially affect the ability of the Vendor to perform any of its obligations under the Contract.

11.1.7 Non compliance of all statutory norms and extant applicable laws relating to the said contract will entitle WBMSCL to terminate the contract.

11.2 Upon occurrence of one or more of the events specified above, WBMSCL shall follow the procedure of issuing notice or show cause specifying the period of time frame and on being not satisfied with the explanation, be entitled to terminate the Contract immediately. The decision of WBMSCL shall be final and binding on the Tenderer.

12. PENALTY FOR DEFAULT:

In case of failure by the Tenderer to perform according to this Contact, including but not limited to failure to obtain necessary export licenses or to make delivery of all of the Goods by the agreed delivery date, after giving the Tenderer written notice to perform, and without prejudice to any other rights or remedies available to WBMSCL. The

Company may in its discretion, exercise one or several of the penal provisions listed below: -

Nature of offence	Penalty to be imposed
Any wrong or misleading information provided by the Tenderer during submission of bids	May lead to blacklisting in WBMSCL for at least 3 years
Spurious / Mislabeled / Misbranded	Termination of Contract. Blacklisting for 5 years. Forfeiture of the Performance Bank Guarantee. Lodging FIR.
Sub-standard after part of the same is consumed	Free of charge fresh supply. Destruction of substandard Medical Device/Item. In case, Item is to be procured from any other source, the difference in cost is to be borne by the vendor. Forfeiture of the Performance Bank Guarantee.
Entire supply being Sub-standard	Free of charge fresh supply. Destruction of substandard Medical Device/Item. In case, Item is to be procured from any other source, the difference in cost is to be borne by the vendor. Forfeiture of the Performance Bank Guarantee. Blacklisting for 3 years
Non-compliance of labelling & Packaging Norms	Return of goods with warning. Free of charge Replacement. Blacklisting for 3 years. Deduction of 10% of the value of the entire contracted goods/delivered goods irrespective of the quantity of defective goods. In case, Item is to be procured from any other source, the difference in cost is to be borne by the vendor. Lodging FIR.
Non execution of contract or non-compliance of Bid norms after Award of Contract.	Forfeiture of the Performance Bank Guarantee. Blacklisting for 5 years
Delayed supply	In case, Item is to be procured from any other source, the difference in cost is to be borne by the vendor. Delay beyond specified day of supply with penalty [as per table 5(a)] Termination of contract and forfeiture of performance security

13. CONFIDENTIALITY:

13.1. WBMSCL and the vendor, its agents, employees, subcontractors and servants shall keep confidential and shall not, without the written consent of the other party hereto, divulge to any third party any documents, data, or other information furnished directly or indirectly by the other party hetero, in connection with the Contract, whether such information has been furnished prior to, during or following competition or termination of the contract. Notwithstanding the above, the vendor may furnish to its subcontractor such documents, data, and other information it received from WBMSCL to the extent required for the subcontractor to perform its work under the contract, in which event the vendor shall obtain from such subcontractor an undertaking of confidentiality similar to that imposed on the vendor.

13.2. WBMSCL shall not use such documents, data and other information received from the vendor for any purpose unrelated to the contract. Similarly, the vendor shall not use such documents, data and other information received from WBMSCL for any purpose other than the performance of the contract.

13.3. The obligation of a party under the two foregoing paragraphs shall not apply to information that:

13.3.1 Now or hereafter enters the public domains through no fault of that party;

13.3.2 Can be proven to have been possessed by that party at time of disclosure and which was not previously obtained, directly, from the other party, or

13.3.3 Otherwise lawfully becomes available to that party from a third party that has no obligation of confidentiality.

14. FORCE MAJEURE:

14.1. *Force majeure* as used herein means any unforeseeable and irresistible act nature, any act of war (whether declared or not), invasion, revolution insurrection, flood earthquake or any other acts of a similar nature or force, provided that such acts arise from causes beyond the control and without the fault or negligence of the vendor. The vendor acknowledges and agrees that, with respect to any obligation under the contract that the vendor must perform any delays or failure to perform such obligation arising from or relating to harsh conditions within such areas shall not, in and of itself, constitute *Force majeure* under the contract. Further the vendor acknowledges and agrees that scarcity of raw materials, power cut, workers unrest (even if wide spread) will not constitute force majeure under the contract.

14.2. In the event of and as soon as possible after the occurrence of any cause constituting *Force majeure*, the vendor shall give notice and full particulars in writing to WBMSCL, of such occurrence or cause if the vendor is thereby rendered unable, wholly or in part perform its obligations and meet its responsibilities under the contract. The vendor shall also notify WBMSCL of any other changes in condition or the occurrence of any event which interferes or threatens to interfere with its performance of the contract. Not more than 15 (fifteen) days following the provision of such notice *Force majeure* or other changes in conditions or occurrence, the vendor shall also submit a statement to WBMSCL of estimated expenditure that will likely be incurred for the duration of the change in condition or the event. On receipt of notice or notices required hereunder,

WBMSCL shall take such action as it considers, in its sole desertion, to be appropriate or necessary in the circumstances, including the granting to the vendor of a reasonable extension of time in which to perform any obligations under the contract.

14.3 If an event of *force majeure* exists and the vendor fails, within 7 (seven) days such event to give notice in writing to WBMSCL pursuant to Article 23.2, and of the vendor is rendered permanently unable, wholly, or in part, by reason of *force majeure* to perform its obligations and meet its responsibilities under the Contract, WBMSCL shall have the right to suspend or terminate the contract on the same terms and conditions as are provided for in Article 19, except that the period of notice shall be 7 (seven) days, in any case, WBMSCL shall be entitle to consider the vendor permanently unable to perform its obligations under the contract in the case of the vendor's suffering any period of suspension in excess of 90 (ninety) days.

15. SOURCE OF INSTRUCTIONS:

The vendor shall neither seek nor accept instructions from any authority external to WBMSCL in connection with the performance of its obligations under the contract. Should any authority external to WBMSCL seek to impose any instructions on the vendors regarding the vendor's performance under the contract, the vendors shall promptly notify and shall provide all reasonable assistance required by WBMSCL. The vendor shall not take any action in respect of its performance of the contract or otherwise related to its obligations under the contract that may adversely affect the interests of WBMSCL, and the vendor shall perform its obligations under the contract with the fullest regard to the interests of WBMSCL.

16. BENEFITS, CORRUPTION AND FRAUD:

16.1. The vendor warrants that it has not and shall not offer any direct or indirect benefit arising from or related to the performance of the contract or the award thereof to any representative, officials, employee, or other agent of WBMSCL or any official of the Health & Family Welfare department, Government of West Bengal or any organization engaged in the procurement process whether during the period the contract is in process or before or after the contract is over. The vendor acknowledges and agrees that any beach of this provision is a breach of an essential term of the contract as specified.

16.2. Corruption means the offering, giving, receiving or soliciting of, directly or indirectly, anything of value to influence the action of any WBMSCL representative, official, employee or agent of WBMSCL or any official of the Health & Family Welfare department, Government of West Bengal or any organization engaged in the selection process or in the execution of the contract.

16.3. Fraud means a misrepresentation or omission of facts in order to influence the selection process or the execution of the contract.

17. USE OF NAME, EMBLEM OR OFFICIAL SEAL OF WBMSCL / THE FIRST PARTY:

The Vendor shall not advertise or otherwise make public for purpose of commercial advantage or goodwill that it has a contractual relationship with WBMSCL, nor shall the vendor, in any manner whatsoever use the name, emblem or official seal of WBMSCL, or any abbreviation of the name of the WBMSCL or Health & Family Welfare department, Government of West Bengal in connection with its business or otherwise without the written permission of WBMSCL.

18. ASSIGNMENT:

18.1. The vendor shall not, except after obtaining the prior written approval of WBMSCL, assign, transfer, pledge, or make any other disposition of this contract or any part hereof or of any of the vendor's right or obligations hereunder, except with the prior written authorization of WBMSCL. The vendor may assign or otherwise transfer the contract to the surviving entity resulting from a reorganization of the Party's operations.

18.2. Prior to the written approval of WBMSCL, the vendor shall promptly notify WBMSCL of such assignment at the earliest opportunity subject to the assignee or transferee agrees in writing to be bound by all of the terms and conditions of the contract and such writing is promptly provided to WBMSCL following the assignment or transfer and WBMSCL finds that the vendors has the financial and technical capacity as laid down in the tender document to carry out the assignment provided that:

18.2.1. Such reorganization is not the result of any bankruptcy, receivership or other similar proceedings; and

18.2.2. Such reorganization arises from sale, merger, or acquisition of all or substantially all of the vendor's assets or ownership interest; and

18.2.3. Such reorganization is not taking place with any of the Tenderer who had participated in the Tender or who will be deemed to have conflict of interest as defined in the tender documents process for the same tender.

18.3 However, should the vendor become insolvent or should control of the vendor change by virtue of insolvency, WBMSCL may, without prejudice to any other right or remedy, terminate this contract.

19. TAXES:

Suppliers shall be entirely responsible for all taxes, duties, license fees etc., incurred until delivery of the contracted Goods to the ***Consignee as stated in the bid document***.

20. PAYMENT PROVISIONS:

20.1 No advance payment towards start-up cost or payment of Item or any other incidental changes will be made to the vendor.

20.2 Payment terms as per 5. (b) - Payment Terms of **Section I: A. Important information at a glance.**

20.3 All Bills/ Invoices should be raised in triplicate in the name of **Managing Director, West Bengal Medical Services Corporation Limited**.

20.4 CENVAT / Deemed Export benefit if enjoyed by the tenderer shall be passed on to WBMSCL.

21. LIQUIDATED DAMAGES:

21.1. Except under the circumstances of *force majeure* as described, if the vendor fails to deliver any or all of the Goods by date(s) of delivery as per conditions of the contract, WBMSCL may, without prejudice to any or all its other remedies under the contract, deduct from the contract price, as per the table attached below as liquidated damages.

Sl. No.	For item	Defaults	Liquidation of the damages
1	5% Alphacypermethrin WP	Non-completion of scheduled supply	0.5% of the price of goods per week beyond the scheduled date of supply subject to a maximum of 5% of total contract value.

21.2. In case whole or a part of the Item consumed which is found to be faulty or unfit for consumption or 'NOT OF STANDARD QUALITY' in subsequent period, the entire price of the goods even if consumed will be recovered from the vendor.

22. NON-WAIVER OF RIGHTS:

The failure by WBMSCL to exercise any rights available to it, whether under the contract or otherwise, shall not be deemed for any purpose to constitute a waiver by WBMSCL of any of its obligations under the contract or in future contracts of similar nature.

23. AMICABLE SETTLEMENTS:

When a dispute arises under the contract the parties shall make all reasonable efforts to resolve through good faith negotiation, failing which they will attempt at dispute resolution with the intervention of the Principal Secretary, the DoH&FW, GoWB

24. SETTLEMENT OF DISPUTES AND ARBITRATION:

Except where otherwise provided in the contract, all questions and disputes relating to the meaning of the specifications designs, drawings and instructions hereinbefore mentioned and as to the quality of workmanship or materials used on the work or as to any other question, claim, right, matter or thing whatsoever, in any way arising out of or relating to the contracts, designs, drawings, specifications, estimates, instructions, orders or these conditions or otherwise concerning the works, or the executions or failure to execute the same, whether arising during the progress of the work, or after the completion or abandonment thereof shall be dealt with as mentioned hereinafter:

If the contractor/ bidders considers any work demanded of him/her to be outside the requirements of the contract, or disputes any drawings, record or decision given in writing by the Engineer-in-Charge or Authorized person any matter in connection with or arising out of the contract or carrying out of the work to be unacceptable, he/she shall promptly within 15 days request the Chairman of the Departmental Dispute Redressal Committee, in writing, for written instruction or decision. Thereupon, the Dispute Redressal Committee shall give its written instruction or decision within a period of three months from the date of receipt of the Contractor's letter.

The designated Dispute Redressal Committee shall be constituted with the following officials as Members:

1.	Secretary, MD-NHM, H&FWD, Govt of West Bengal	Chairman
2.	Special Secretary, H&FWD, Govt. of W.B.	Member
3.	General Manager, WBMSCL	Member
4.	Financial Advisor, H&FWD, Govt of W.B.	Member
5.	Chief Engineer/Procurement-in Charge, WBMSCL	Member secretary and Convenor

This provisions will be applicable irrespective of the value of the works to which the dispute may relate.

25. PROCEDURE FOR SUSPENSION AND DEBARMENT OF SUPPLIER, CONTRACTORS AND CONSULTANTS

The procedure as laid down below shall govern the suspension/debarment of Suppliers/Contractors/Consultants (Contractors for brevity) involved in Government procurement for offences or violations committed during competitive bidding and contract implementation, for the works under different Departments of Government of West Bengal.

Grounds for Suspension and Debarment:-

1. Submission of eligibility requirements containing false information or falsified documents.
2. Submission of Bids that contain false information or falsified documents, or the concealment of such information in the Bids in order to influence the outcome of eligibility screening or any other stage of the bidding process.
3. Unauthorized use of one's name/digital signature certificate for the purpose of bidding process.
4. Any documented unsolicited attempt by a bidder (A Person/ Contractor/ Agency/ Joint Venture/ Consortium/ Corporation participating in the procurement process and/or a person/ Contractor/ Agency/ Joint Venture/ Consortium/ Corporation having an agreement/contract for any procurement with the department shall be referred as Bidder) unduly influencing the outcome of the bidding in his favour.
5. Refusal or failure to post a self-declaration to the effect of any previous debarment imposed by any other department of State Government and/or Central Government.
6. All other acts that tend to defeat the purpose of the competitive bidding such as lodging false complaint about any Bidder, lodging false complaint about any Officer duly authorized by the Department, restraining any interested bidder to participate in the bidding process, etc.
7. Assignment and subcontracting of the contract or any part thereof without prior written approval of the procuring entity.
8. Whenever adverse reports related to adverse performance, misbehaviour, direct or indirect involvement in threatening, making false complaints etc. damaging the reputation of the department or any other type of complaint considered fit by the competent authority of the department, are received from more than one Officer or on more than one occasion from individual Officer.
9. Refusal or failure to post the required performance security / earnest money within the prescribed time without justifiable cause.
10. Failure in deployment of Technical Personnel, Engineers and /or Work Supervisor having requisite license / supervisor certificate of competency as specified in the contract.
11. Refusal to accept an award after issuance of "Letter of Acceptance" or enter into contract with the Government without justifiable cause.

12. Failure of the Contractor, due solely to his fault or negligence, to mobilize and start work or performance within the specified period as mentioned in the "Letter of Acceptance", "Letter of Acceptance cum Work Order", "Work Order", "Notice to Proceed", "Award of Contract", etc.

13. Failure by the Contractor to fully and faithfully comply with its contractual obligations without valid cause, or failure by the Contractor to comply with any written lawful instruction of the Procuring Entity / Authority (the Officer authorized by the Administrative Department, Government of West Bengal for procurement) or its representative(s) pursuant to the implementation of the Contract.

14. For the procurement of Consultancy Service/Contracts, poor performance by the Consultant of his services arising from his fault or negligence. Any of the following acts by the Consultant shall be construed as poor performance.

    I. Non deployment of competent technical personnel, competent Engineers and/or work supervisors;

    II. Non-deployment of committed equipment, facilities, support staff and manpower;

    III. Defective design resulting in substantial corrective works in design and/or construction;

    IV. Failure to deliver critical outputs due to consultant's fault or negligence;

    V. Specifying materials which are inappropriate and substandard or way above acceptable standards leading to high procurement cost;

    VI. Allowing defective workmanship or works by the Contractor being supervised by the Consultant.

15. For the procurement of goods, unsatisfactory progress in the delivery of the goods by the manufacturer, supplier, or distributor arising from his fault or negligence and/or unsatisfactory or inferior quality of goods, vis-à-vis as laid down in the contract.

16. Willful or deliberate abandonment or non-performance of the project or Contract by the Contractor resulting in substantial breach thereof without lawful and/or just cause.

CATEGORY OF OFFENCE :-

A. First degree of offence 1 to 16 of the above Clause-41 to be considered as First degree of offence.

B. Second degree of offence. Any one of the offences as mentioned under 'A' above. committed by a particular Bidder/Contractor/Supplier on more than one occasion, be considered as Second degree of offence.

In addition to the penalty of suspension/debarment, the bid security / earnest money posted by the concerned Bidder or prospective Bidder shall also be forfeited.

PENALTY FOR OFFENCE:-

i. For committing First degree of offence: Disqualifying a Bidder from participating in any procurement process under the Administrative control of WBMSCL up to 2 (two) years as decided by the Debarment Committee of Health and Family Welfare Department, West Bengal.

ii. For committing Second degree of offence: Disqualifying a Bidder from participating in (any procurement process under the Administrative control of WBMSCL up to 3 (three) years as decided by the Debarment Committee of Health and Family Welfare Department, West Bengal.

PROCEDURE OF SUSPENSION AND DEBARMENT DURING THE PROCUREMENT PROCESS

Initiation of Action, Notification and Hearings:

Any bidder or procurement authority on his own or based on any other information made available to him may invite the process of suspension/debarment proceedings by filing a written application with the Bid Evaluation Committee and such filing of written application has to be done within forty eight hours from the date and time of publication of the result of technical evaluation of any bid.

a) Upon verification of the existence of grounds for suspension/debarment, the Chairperson of Bid Evaluation Committee shall immediately notify the bidder concerned either electronically through his registered e-mail or in writing to his postal address, advising him that:

i) A complaint has been filed against him and prima facie material has been found, which may lead to suspension/debarment.

ii) He has been recommended to be placed under suspension/debarment by the suspension committee (as constituted by the respective Administrative Department) stating the ground for such.

iii) The said bidder, within three days from the date of issue of such notification by the Bid Evaluation Committee, may approach the Chairperson of Suspension Committee by submitting all required documents in his favour for hearing. Any application made thereafter would not be entertained.

Such notice should contain the e-mail id and the postal address of the Chairperson of the Suspension Committee.

b) After receiving the recommendation for suspension from Bid Evaluation Committee, Suspension Committee shall issue a notice to the alleged bidder electronically through his registered e-mail id, to submit all relevant documents in support of his defence within three working days after issuance of the notice of the Suspension Committee. The Suspension Committee will conduct the hearing within seven working days from the date of receipt of the documents from the alleged bidder If no appeal has been received from the alleged bidder or if after hearing sufficient ground for suspension is found, the Suspension Committee, will suspend the alleged bidder from participating in the procurement process under the Administrative Department for a period of six months from the date of issuance of suspension order. The Chairperson of the Suspension Committee shall issue the suspension order within seven days

from the last date of hearing and shall notify the bidder concerned either electronically through his registered e-mail id or in writing to his postal address. The Chairperson of the Suspension Committee shall also inform the decision to all concerned.

If sufficient reason for suspension is not found, the Suspension Committee would reject the recommendation of Bid Evaluation Committee and would allow the bidder to take part in the tendering process.

If the bidder is suspended, the Suspension Committee would recommend debarment of the bidder and forward the case with all documents to the Debarment Committee for further action.

c) The Debarment Committee upon receipt of the recommendation of the Suspension Committee shall scrutinize the documents. The Debarment Committee will hold a hearing of the alleged bidder and issue necessary orders within ten working days from the last date of hearing. The Debarment Committee, if satisfied after hearing, shall forward the case to the Department for orders of Debarment. The Department in due course will issue Debarment Order disqualifying/prohibiting the erring bidder from participating in the bidding/procurement of all projects under the Administrative Department for a specified period. The alleged bidder shall be intimated accordingly either electronically through his registered e-mail id or in writing to his postal address. Otherwise, the Debarment Committee may reject the recommendation of the Suspension Committee. The Chairperson of the Debarment Committee shall also inform the decision to all concerned.

PROCEDURE FOR DEBARMENT DURING THE CONTRACT IMPLEMENTATION STAGE:-

A. Upon termination of contract due to default of the Bidder, the Engineer- in-Charge shall recommend for debarment to the Bid Evaluation Committee. The Bid Evaluation Committee shall submit his recommendation of debarment of the alleged Bidder along with a detailed report stating clearly the reasons for debarment to the Debarment Committee within 30 (thirty) days from the date of termination of contract. The alleged Bidder shall be intimated accordingly either electronically to his registered e-mail id or in writing to his postal address. The Chairperson of Bid Evaluation Committee shall also inform the decision to all concerned.

B. The Debarment Committee upon receipt of the recommendation of Bid Evaluation Committee shall scrutinize the documents. The Debarment Committee will hold a hearing about the matter from the Bidder and issue necessary orders within 10 (ten) working days from the last date of hearing. The Debarment Committee, if satisfied after hearing, shall forward the case to the Department for the order of debarment. The Department in due course will issue a debarment order disqualifying/prohibiting the erring Bidder from participating in the bidding/procurement of all projects under the Administrative Department, Government of West Bengal for a specified period. The alleged Bidder shall be intimated accordingly either electronically to his registered e- mail id or in writing to his postal address Otherwise the Debarment Committee may reject the recommendation of the Bid Evaluation

Committee. The Chairperson of the Debarment Committee shall also inform the decision to all concerned.

STATUS OF SUSPENDED / DEBARRED BIDDER:-

a) Bidder placed under Suspension/Debarment by the competent authority will not be allowed to participate in any procurement process under the Administrative Department within the period of suspension/debarment the earnest money of the suspended Bidder shall stand forfeited to the Government.

b) If the Suspension/Debarment Order is issued prior to the date of issue of "Letter of Acceptance", "Letter of Acceptance cum Work Order" "Work Order". "Notice to Proceed". "Award of Contract" etc. for any Bid, the Suspended/Debarred Bidder shall not be qualified for Award for the said Bid and such Procurement Process will be dealt with as per existing norms by simply excluding the erring Bidder.

c) If the Suspension/Debarment Order is issued after award of a Government Project/Contract to the Debarred Bidder, the awarded Project/Contract shall not be prejudiced by the said Order provided that the said offence(s) committed by the Debarred Bidder is not connected with the awarded project/contract.

26. COURT OF LAW:

In case of any dispute in between the parties the matter will be settled in appropriate Court of Law within Kolkata Jurisdiction.

Section III: Special Conditions of Contract (SCC)

Deleted.

Section IV: Schedule of Requirements

Consignee Details, 2026						
State Name	Sl. No.	District/location name	contact person	Address	for the Districts	Quantity (Kg)
West Bengal	1	**Jalpaiguri** (for Jalpaiguri, Malda, Alipurduar)	Biplabi Sarkar (9832608820 / 8250388219)	Public Health Store, CMOH Office, Jalpaiguri Govt. Medical Collage & Hospital campus.	for Jalpaiguri, Alipurduar	12323
	2	**Murshidabad**	Milan Bhandari, (8906380973 / 9434810044)	District Reserve store, Near Old fouzdari court compound, Near SBI bank main Branch, Berhampore, Murshidabad	Malda, Murshidabad,	25034
	3	**Purulia** (for Purulia, Bankura, Jhargram)	Avik Pal (Pharmacist) 6295234124	District reserve store, office of the chief medical officer of health, zilla swasthya Bhavan, Ranchi Road Purulia-723101	Purulia, Jhargram, Purba medinipur	26544
	4	Bankura	Shyamal Karmakar,Mobile number - 6296229319/8900339854	Old Malaria office,Kenduadihi, Bankura-722101, Dist-Bankura,West Bengal	Bankura, Bishnupur, Birbhum	7723
	5	**State (IBD store)**	Mr.rakesh Das 8798043069	Central Family Welfare Store 541B, Rabindra Sarani, Baghbazar,Near Laxmi Apartment, Kolkata - 700 003	Basirhat, Howrah, south 24 PGS, Diamond Harbour HD,Howrah, Nadia	7424
Total Quantity						**79048**

TECHNICAL SPECIFICATIONS

(Read with Annexure)

ALPHA-CYPERMETHRIN WETTABLE POWDER

WHO specification 454/WP (April 2006∗)

This specification, which is PART ONE of this publication, is based on evaluations of data submitted by the manufacturers whose names are listed in the evaluation reports (454/2005, 454/2007). It should be applicable to relevant products of these manufacturers, and those of any other formulators who use only TC from the evaluated sources. The specification is not an endorsement of those products, nor a guarantee that they comply with the specification. The specification may not be appropriate for the products of other manufacturers who use TC from other sources. The evaluation reports (454/2005, 454/2007), as PART TWO, form an integral part of this publication.

1 Description

The material shall consist of a homogeneous mixture of technical alphacypermethrin, complying with the requirements of WHO specification 454/TC (April 2006), together with filler(s) and any other necessary formulants. It shall be in the form of a freely flowing fine powder, free from visible extraneous matter and hard lumps.

2 **Active ingredient**

2.1 **Identity tests** (454/WP/M/2, CIPAC Handbook H, p.18, 1998) The active ingredient shall comply with an identity test and, where the identity remains in doubt, shall comply with at least one additional test.

2.2 **Alpha-cypermethrin content** (454/WP/M/3, CIPAC Handbook H, p.18, 1998), The alpha-cypermethrin content shall be declared (100 g/kg) and, when determined, the average measured content shall not differ from that declared
by more than ±10%.

3. **Physical properties**

3.1 **pH range** (MT 75.3, CIPAC Handbook J, p.131, 2000) pH range: 4 to 8.

3.2 **Wet sieve test** (MT 185, CIPAC Handbook K, p.149, 2003)
Maximum: 2% of the formulation shall be retained on a 75 ìm test sieve.

3.3 **Suspensibility** (MT 184 CIPAC Handbook K, p.142, 2003) (Notes 1 & 2)

∗ Specifications may be revised and/or additional evaluations may be undertaken. Ensure the use of current versions by checking at: http://www.who.int/whopes/quality/en/.

A minimum of 70% of the alpha-cypermethrin content found under 2.2 shall be in the suspension after 30 min in CIPAC standard water D at 30 ± 2°C.

3.4 **Wettability** (MT 53.3.2, CIPAC Handbook F, p.164, 1995)
The formulation shall be completely wetted in 1 min with swirling.

3.5 **Persistent foam** (MT 47.2, CIPAC Handbook F, p.152, 1995) (Note 3) Maximum: 60 ml after 1min.

4 **Storage stability**

4.1 **Stability at elevated temperature** (MT 46.3, CIPAC Handbook J, p.128, 2000) After storage at 54 ± 2°C for 14 days, the determined average active ingredient content must not be lower than 95%, relative to the determined average content found before storage (Note 4), and the formulation shall continue to comply with the clauses for:

- pH range (3.1),
- wet sieve test (3.2),
- suspensibility (3.3),
- wettability (3.4).

Note 1 The formulation should be tested at the highest and lowest rates of use recommended by the supplier, provided it does not exceed the conditions given in method MT184.

Note 2 Chemical assay is the only fully reliable method to measure the mass of active ingredient still in suspension. However, simpler gravimetric methods may be used on a routine basis provided that these methods have been shown to give results equal to those of chemical assay. In case of dispute, the chemical method shall be the "referee method".

Note 3 The mass of sample to be used in the test should be specified at the highest rate recommended by the supplier.

Note 4 Analysis of the formulation, before and after the storage stability test, should be carried out concurrently (i.e. after storage) to reduce the analytical error.

Also see the details in Annexure.

Inspections and Tests

a) The Vendor shall get the Goods inspected in the manufacturer's works by a competent authority and submit a test certificate that the Goods conform to laid down technical specifications.

b) WBMSCL or its representative may inspect and / or test any or all item of the Goods to confirm their conformity to the Contract.

Section V. Bidding Forms

Form 1: Check-List

[Please fill in and include with your Bid]

Important notes:

Note 1: It is essential that all documents in hard copy may be placed before the Committee and arranged in the same sequence as given in the Check List. All the documents should be appropriately flagged.

Note 2: If any document is written in any language other than English, an English translation of the document duly authenticated is to be submitted.

Note 3: The documents listed at **Sl. no. 1, 2, 3, 7, 9, 13 must be submitted online** during online bid submission or else the bid would be liable to be summarily rejected.

Note 4: The bidders should also note that after opening of the technical bids, if any document other than those noted under note 3, is found wanting, WBMSCL shall reserve the right to allow late submission of such document in hard copies at its own discretion within a specified time limit.

Non statutory documents to be submitted under My Space				
Sl. No.	Activity	Yes / No / NA	Page No in the Bid	Remarks
1	PAN Card of the bidder			
2	15 – digit Goods and Services Taxpayer Identification Number (GSTIN)			
3	Performance Statement Form (For the period of last three financial years) – **Form 6** of Section V **To attach:** Documentary evidence (Client's certificate) / Order Copy along with proof of supply/payment, completion/payment certificate in support of execution of orders - from at least 2 (two) State Government/Government Organizations Municipality/Gram Panchayet in the last 3 (three) financial years.			
4	**Form 10:** Basic information Form			
5	Documents/certifications as required in technical specifications			
6	Income Tax returns for assessment year 2022-2023, 2023- 2024 & 2024-2025			
7	Tender Form as per **Form 2**			
8	Manufacturer's Authorization (If applicable) as per **Form 5** of Section V			
9	Earnest Money Deposit (EMD) submission/exemption document			
10	Product briefing (Self Declaration) with technical data sheet			
11	Comparative Data Table of the Technical Specifications (**Form 3**)			
12	1 set of brochure/literature of the offered product.			

13	Average Annual Turnover of the Company in Financial Years i.e., 2022-2023, 2023- 2024 & 2024-2025 to be certified by practicing Chartered Accountant as per **Form 11**			

Form 2: APPLICATION FORMAT

Tender Form

(To be furnished on non-judicial stamp-paper of Rs. 100/-, affirmed before a First Class Magistrate/ Notary/ Executive Magistrate)

(All the bidders have prepare and submit Form 1)

Date: ……

Bid Reference No.: _____, Item - ____

Name of Contract: Supply of *[Name of the item]*

To

Managing Director,

West Bengal Medical Services Corporation Ltd,

Swasthya Bhawan II,

GN- 29, Sector – V, Salt Lake,

Kolkata - 700 091

Sir,

I/We, the undersigned hereby accept all the terms and conditions of the Bid Reference No.: **WBMSCL/NIT- xxx/2026, dated-xx.xx.2026** and its Amendments and Addendum thereto are read and accepted without any modification or condition(s). We now offer to Supply and Commissioning of Medical Equipments for *[Name of the equipment]* for Hospital of the Govt. of West Bengal in conformity with your above referred document.

We also

1. Certify that:

   a) We have examined and have no reservations to the Bidding Documents, including Addenda issued in accordance with Instructions to Bidders.

   b) The offered products are in accordance with the required specifications and technical requirements

c) Our Bid consisting of the Technical Bid and the Price Bid shall be valid for a period of **2(two)** years from the date fixed for the bid submission deadline in accordance with the Bidding Documents. However, the prices quoted by us and accepted by WBMSCL shall hold good and remain valid for a period of **2(two)** year from the date of signing of the contract and no additional claims will be made on account of any price variation or fluctuation in market rates. The rate quoted shall remain binding upon us and may be accepted at any time before the expiration of **2(two)** year.

d) If our bid is accepted, we will submit a performance security within 14 (fourteen) days of issuance of Award of Contract (AOC) in the prescribed format as given in the bid document.

e) Our company has been incorporated in accordance with the laws of _____ (*insert name of country of incorporation*) and governed by them.

f) Our Company have commissioned _____nos. of the offered model and providing necessary service support to the equipments.

g) We have never been blacklisted by any Government Department/ Agency in India during the last 5 years.

h) There is no adverse report against the equipment offered by us in any Government Department / Agency in India.

i) We will permit WBMSCL or its representative to inspect our accounts and records and other documents relating to the bid submission.

j) All the statements made in the attached documents are true and correct. In case of any information submitted proved to be false or concealed, penalties shall be imposed in terms of the bid document.

k) We, if selected in the tender, will arrange to maintain 97% service up time i.e. a minimum of 354 days out of 365 days in a year of the offered equipment *[name the equipment]* during the warranty & CMC period.

l) The time for rectification of the equipment will not be more than 48 hours from the time of the complaint is lodged.

m) In case the defective equipment is not put back to use beyond 72 hours, we will install alternative equipment for providing uninterrupted service.

n) The penalty for beyond 72 hours downtime & if standby unit is not provided, will be borne by us in terms of Clause 8. Service Up time in Warranty & CMC mentioned in A. Important information at a glance Under Section I: Instructions to Tenderers of the bid document.

2. understand that:

(i) Partial or incomplete bid submission will lead to cancellation of our bid.

(ii) The tender inviting and accepting authority can vary quantity above in case of need / or to decrease the quantity of goods and related services originally specified in Section IV, Schedule of Requirements, and without any change in the unit prices or other terms and conditions of the Bid Documents.

(iii) The tender inviting and accepting authority reserves the right to reject any application without assigning any reason.

Enclose:

1. Non Statutory Documents/ My Documents
2. Statutory Documents (Bid A & Bid B)
3. Forms & Annexure duly filled up, signed & notarized (where applicable)

Name.....

In the capacity of.....

Signed .....

Duly authorized to sign the Bid for and on behalf of (if applicable).....

Date.....

Form 3: Technical Specification Form

(Comparative Data Table)

Tenderers must complete the right column of the below table and the compliance confirmation statement as included in Section IV, Schedule of Requirements; Technical Specifications.

Tender/Schedule No. ___ :

Sl.	*WBMSCL's minimum Technical Requirements*	*Please fill-in*

THE OFFERED PRODUCTS ARE IN ACCORDANCE WITH THE REQUIRED SPECIFICATIONS AND TECHNICAL REQUIREMENTS:

YES
NO

ANY DEVIATIONS MUST BE LISTED BELOW:

Form 4: Bid Security (Bank Guarantee) Form

DELETED

Form 5: Manufacturer's Authorization Form

[The Tenderer shall require the Manufacturer to fill in this Form in accordance with the instructions in the bid document. This letter of authorization should be on the letterhead of the Manufacturer and should be signed by a person with the proper authority to sign documents that are binding on the Manufacture. Such certificate is not required where Manufacturer is the Tenderer.]

Date:
NIT No.:

To:
MD, WBMSCL

WHEREAS

We *[insert complete name of Manufacturer],* who are official manufacturers of *[insert type of goods manufactured],* having factories at *[insert full address of Manufacturer's factories],* do hereby authorize *[insert complete name of Tenderer]* to submit a bid the purpose of which is to provide the following Goods, manufactured by us *[insert name and or brief description of the Goods] and* to subsequently negotiate and sign the Contract.

We hereby extend our full guarantee and warranty in accordance with the General Conditions for Goods, with respect to the Goods offered by the above firm.

Authorised Signatory of the Manufacturer_____

Name_____

Designation with stamp_____

Date_____

Form 6: Performance Statement Form

(For the period of last three years, as applicable
with supporting documents)

Bid no:_____ Date of Opening:_____

Name of the Firm _____

Order placed by (Full address of purchaser)	Order no & date	Name/description & quantity of ordered items	Value of Order	Date of completion of Delivery		Remarks indicating reasons of late delivery, if any	Was the supplies of goods satisfactory
				As per Contract	Actual		

Signature and seal of the Tenderer

_____

Form 7: D e l e t e

Form 8: Statement of Breakup of Duties and Taxes (to be uploaded for each SCHEDULE)

Sl. No.	Particulars	Price (In INR)
1	Basic Price of Item including value of goods, accessories, freight/door delivery charges, demonstration, end user training and any other charges as applicable excluding GST	
2	GST (indicate percent)	
Gross Price		

Form 9: D e l e t e d

Form 10:
Basic information Form

Basic information to be provided with the bid

1.1 Identity

(a) Name	
(b) Registered address	
(c) Phone number(s)	
(d) Fax	
(e) Email	
(f) Website	
(g) Address of Manufacturing & Operational Unit along with Phone number, fax number, E-mail ID	

1.2 Contact Person

(a) Name	
(b) Designation	
(c) Location	
(d) Mailing address	
(e) Phone number(s)	
(f) Fax	
(g) Email	

Form 11: Turnover Certificate

I certify that Average Annual Turnover of *(insert the name of the company)* in India in medical item division during the last 3 Financial Years (2022-2023, 2023-2024 & 2024-2025) is Rs. ..... as per the Audited Accounts of the Organization.

Signature and seal of Chartered Accountant
with MRN

_____

Form 12: Declaration of Quality Certification of Item

Deleted

Form 13: CONSIGSIGNEE RECEIPT CERTIFICATE

(To be given by consignee's authorized representative) West Bengal Medical Services Corp. Ltd.

[The consignee may issue an additional challan receipt if delivered by courier or transporter]

Date of supply:	
Name and Address of the Consignee:	
Name of the item supplied (with Make & Model):	
Purchase Order / Contract No.:	
Name of the Supplied / Manufacturer:	
Quantity supplied:	
Place of destination:	
Invoice No. & Date:	
Details of Batch / Serial Numbers of item supplied:	
…… (Signature & Office Seal of authorized representative of Consignees with date) [Name and designation of the signatory to be written capital letter]	
…… (Signature & Office Seal of Head of the Institute / Office with date) [Name and designation of the signatory to be written capital letter]	

General guidance for e-Tendering

Instructions / Guidelines for tenders for electronic submission of the tenders online have been annexed for assisting the prospective Tenderers to participate in e-Tendering.
Registration of Tenderers:

1. Any tenderer willing to take part in the process of e-Tendering will have to be enrolled & registered with the Government e-Procurement system, through logging on to https://etender.wb.nic.in. The prospective Tenderer is to click on the link for e-Tendering site as given on the web portal.

2. Digital Signature certificate (DSC): Each Tenderer is required to obtain a class-II or Class-III Digital Signature Certificate (DSC) from NIC for submission of tenders, from the approved service provider of the National Information's Centre (NIC) on payment of requisite amount.

3. The Tenderer can search & download NIT & Tender Documents electronically from computer once he logs on to the website using the Digital Signature Certificate. This is the only mode of collection of Tender Documents.

4. Participation in more than one item: A prospective Tenderer shall be allowed to offer rate as per his or her choice subject to fulfilment of conditions laid down hereinabove and conforming to his production capacity to be laid down in the tender paper.

5. Submission of Tenders: General process of submission, Tenders are to be submitted through online to the website at a time for each work, one in Technical Proposal & the other is Financial Proposal before the prescribed date &time using the Digital Signature Certificate (DSC) the documents are to be uploaded virus scanned copy duly Digitally Signed. The documents will get encrypted (transformed into non readable formats).

6. Physical verification of samples to be made by the expert committee after evaluating Technical proposal.

Section VI. Contract Form

BID SECURITY (BANK GUARANTEE) FORM

[Insert: No Bid Security is requested or The Bank shall fill in this Bank Guarantee Form in accordance with the instructions indicated.]

_____

[Bank's Name and Address of Issuing Branch or Office]

Beneficiary: _____ [Name and Address of WBMSCL]

Date: _____

BID GUARANTEE No.: _____

We have been informed that[name of the Tenderer] (hereinafter called "the Tenderer")has submitted to you its bid dated (hereinafter called "the Bid") for the execution of [name of contract] under Invitation to Bid No. [NIT number] ("the NIT").

Furthermore, we understand that, according to your conditions, bids must be supported by a bid guarantee. At the request of the Tenderer, we[name of Bank] hereby irrevocably undertake to pay any sum or sums not exceeding in total an amount of[amount in figures] ([amount in words]) upon receipt by us of your first demand in writing accompanied by a written statement stating that the Tenderer is in breach of its obligation(s) under the bid conditions, because the Tenderer:

(a) has withdrawn its Bid during the period of bid validity specified by the Tenderer in the Form of Bid; or
(b) having been notified of the acceptance of its Bid by WBMSCL during the period of bid validity , (i) fails or refuses to execute the Contract Form; or (ii) fails or refuses to furnish the performance security. If required, in accordance with the Instruction to Tenderers.

This guarantee will expire: (a) if the Tenderer is the successful Tenderer, upon our receipt of copies of the contract signed by the Tenderer and the performance security issued to you upon the instruction of the Tenderer; or (b) if the Tenderer is not the successful Tenderer, upon the earlier of (i) our receipt of a copy of your notification to the Tenderer of the name of the successful Tenderer; or (ii) twenty – eight days after the expiration of the Tenderer's Bid.

Consequently, any demand for payment under this guarantee must be received by us at the office on or before that date.

This guarantee is subject to the Uniform Rules for Demand Guarantees, ICC Publication No. 458.

(c) While issuing Bank Guarantee, issuing applicant must mention receiver's details as **ICICI Bank IFSC ICIC0001056, Branch Salt Lake Sector 5**, in BG text at which SFMS IFIN 760 message to be send by issuing bank, to establish the authenticity of given BG.

_____

[Signature]

Annexure: Technical specification details

National Center for Vector Borne Diseases Control, Delhi

Technical Specification of Synthetic Pyrethroids (wdp) under Kala-Azar

14.06.2024

A. The Central Insecticide Board (CIB) has approved the following Insecticides for Public Health use.

1. Deltamethrin 2.5% WP
2. Cyfluthrin 10% WP
3. Lambdacyhalothrin 10% WP
4. Alphacypermethrin 5% WP
5. Bifenthrin 10% WP

The details of the description, active ingredient, physical properties, wet sieve test, wettability, persistent foam, storage stability etc should be as per BIS specification [refer Annexure – i to v for each insecticide(s)] mentioned at A above.

Above Technical Specification of Synthetic Pyrethroid (wdp) – KA under NVBDCP has been approved by Technical Specification Committee in the meeting held on 06.05.2024.

(Ms. Akansha Jain)
AGM(QA), CMSS

(Dr. T. Sonai Rajan)
Asst. Director, CIB&RC

(Dr. Shahwar Kazmi)
NPO-VL, WHO

(Dr. Vipay Garg)
Jt. Director, NCDC

26/6/24

(Dr. Sambit Pradhan)
Asst. Director &
Member Secretary

(Dr. Rinku Sharma)
Jt. Director, NCVBDC

(Dr. Annam Visala)
JDC(I), CDSCO

(Dr. Prashanta Saini)
Scientist C, VCRC

(Dr. Mehwash Haider)
Asst. Prof., VMMC-SJH

(Dr. M.P.S. Chawla)
Cons. Prof. &
HoD(Med.)
ABVIMS& RML H

(Dr. Mala Chhabra)
Cons. (Microb.)
ABVIMS & RMLH

(Dr. Arvind Kumar)
Addl. Prof.
(Med.)AIIMS

(Dr. Sparsh Gupta),
Prof. (Pharm.), VMMC-SJH

(Dr. Preeti Wadhawan)
CMO(SAG), I/c, MSO

(Dr. Sagar Borker)
Asst. Prof. (PSM),
ABVIMS & RMLH

Dr. Kanika Jain
Asst. Prof. (Hosp.)
AIIMS

(Dr. S.C.Sarangi)
Addl. Prof. (Pharm.)
AIIMS

Dr. Ajay Kumar
Sci. B, RMRIMS, Patna

(Dr. Roshan K Topno)
Sci. E, RMRIMS, Patna

(Dr. Abhinav Sinha)
Scientist F, NIMR, Delhi

(Dr. Neelima Mishra),
Scientist G, ICMR

(Sh. Rakesh Kumar)
DDG(Stat.), Dte. GHS

(Dr. Rupak Chatterjee)
Advisor, MSO

(Dr. Tanu Jain)
Director, NCVBDC

Prof. (Dr.) Atul Goel
Director General, Dte. GHS & Chairperson

Page 1 of 1

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इंटरनेट मानक

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Mazdoor Kisan Shakti Sangathan
"The Right to Information, The Right to Live"

"पुराने को छोड नये के तरफ"
Jawaharlal Nehru
"Step Out From the Old to the New"

IS 13457 (1992): Pesticide - Deltamethrin WP [FAD 1: Pesticides and Pesticides Residue Analysis]

"ज्ञान से एक नये भारत का निर्माण"
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"Invent a New India Using Knowledge"

Act Number 22 of 2005
The Indian Parliament
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IS 13457 : 1992
(Reaffirmed - 2012)

भारतीय मानक

कीटनाशक – डेल्टामैथारिन डब्ल्यू पी – विशिष्टि

Indian Standard

PESTICIDE — DELTAMETHRIN WP — SPECIFICATION

UDC 632·951 DEL

© BIS 1992

BUREAU OF INDIAN STANDARDS
MANAK BHAVAN, 9 BAHADUR SHAH ZAFAR MARG
NEW DELHI 110002

June 1992 Price Group 1

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AMENDMENT NO. 1 MAY 1994
TO
IS 13457 : 1992 PESTICIDE — DELTAMETHRIN WP — SPECIFICATION

(*Page* 2, *Table* 1):

a) *Sl No.* (ii), *col* 2
b) *Sl No.* (iii), *col* 2
} — Delete the words 'after accelerated storage'.

(FAD 1)

Reprography Unit, BIS, New Delhi, India

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AMENDMENT NO. 2 JANUARY 1996
TO
IS 13457 : 1992 PESTICIDE — DELTAMETHRIN WP — SPECIFICATION

(*Page* 1, *clause* 2) — Substitute '1070 : 1992 Reagent grade water (*third revision*)' *for* '1070 : 1977 Water for general laboratory use (*second revision*)'.

(*Page* 1, *clauses* 3.1.1 *and* 3.1.2) — Substitute 'deltamethrin technical' *for* 'deltamethrin, technical'.

(*Page* 1, *clause* 3.3.1) — Substitute the following for the existing:

'3.3.1 Deltamethrin content shall be declared. When tested by the method prescribed in Appendix A of IS 12005 : 1987, the observed deltamethrin content, percent (m/m) of any of the samples shall not differ from the declared nominal value by more than the tolerance limits indicated below (*see* also clause 6):

Nominal Value, Percent	*Tolerance Limit, Percent*
Up to 9	+ 10 − 5
Above 9 and below 50	± 5
50 and above	+ 5 − 3

(*Page* 1, *clause* 4) — Substitute the following for the existing:

'4 PACKING

The material shall be packed in HM-HDPE or mild steel containers provided with LDPE liners of thickness not less than 0.062 mm. It shall also conform to the general requirements given in IS 8190 (Part 2) : 1988.'

(*Page* 1, *clause* 5) — Add the following at the end:

'5.1 BIS Certification Marking

The product may be marked with Standard Mark.

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Amend No. 2 to IS 13457 : 1992

5.1.1 The use of the Standard Mark is governed by the provisions of Bureau of Indian Standards Act, 1986 and the Rules and Regulations made thereunder. The details of conditions under which the licence for the use of Standard Mark may be granted to manufacturers or producers may be obtained from the Bureau of Indian Standards.'

[*Page* 2, *Table* 1 (*see also Amendment No.* 1)] — Substitute the following for the existing:

Sl No.	Characteristic	Requirement	Method of Test, Ref to	
			Appendix of IS 12005 : 1987	Cl No. of of IS 6940 : 1982
(1)	2)	(3)	(4)	(5)
i)	Deltamethrin content, percent by mass	Nominal value as declared on the container (*see* 3.3.1)	A	—
ii)	Sieving (material passing through 45-micron IS Sieve), percent by mass, *Min* [*see* IS 460 (Part 1) : 1985]	99.0	—	11.1
iii)	Suspensibility, percent by mass, *Min*	75.0	—	11.2
iv)	Acidity (as H_2SO_4) or alkalinity (as NaOH), percent by mass, *Max*	0.5	—	11.3
v)	Wettability in seconds, *Max*	120	—	11.4

(*Page* 2, *clause* 7.3) — Substitute '1070 : 1992' *for* '1070 : 1977'.

(FAD 1)

Reprography Unit, BIS, New Delhi, India

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Pesticides Sectional Committee, FAD 1

FOREWORD

This Indian Standard was adopted by the Bureau of Indian Standards, after the draft finalized by the Pesticides Sectional Committee had been approved by the Food and Agriculture Division Council.

Deltamethrin WP is largely used in the control of insect pests in public health and grain storages.

Deltamethrin WP is generally manufactured to contain 2·5 percent (*m/m*) of deltamethrin.

In the preparation of this standard, due consideration has been given to the provisions of the *Insecticides Act*, 1968 and the Rules framed thereunder. However, this standard is subject to the restrictions imposed under the Act and Rules, wherever applicable.

For the purpose of deciding whether a particular requirement of this standard is complied with, the final value, observed or calculated, expressing the result of a test or analysis, shall be rounded off in accordance with IS 2 : 1960 'Rules for rounding off numerical values (*revised*)'. The number of significant places retained in the rounded off value should be the same as that of the specified value in this standard.

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Indian Standard

PESTICIDE — DELTAMETHRIN WP — SPECIFICATION

1 SCOPE

This standard prescribes the requirements and the methods of sampling and test for deltamethrin WP.

2 REFERENCES

The Indian Standards listed below are necessary adjuncts to this standard:

IS No.	*Title*
460 (Part 1) : 1985	Test sieves : Part 1 Wire cloth test sieves (*third revision*)
1070 : 1977	Water for general laboratory use (*second revision*)
6940 : 1982	Methods of test for pesticides and their formulations (*first revision*)
8190 (Part 1) : 1988	Requirements for packing of pesticides : Part 1 Solid pesticides (*second revision*)
10627 : 1983	Method for sampling of pesticidal formulations
12005 : 1987	Deltamethrin, technical

3 REQUIREMENTS

3.1 Constituents

3.1.1 The material shall consist of deltamethrin, technical together with suitable carrier(s), stabilizer(s) and other formulant(s).

3.1.2 Deltamethrin, technical, employed in the manufacture of the material, shall conform to IS 12005 : 1987.

3.2 Description

The material shall be fine, free flowing, whitish, homogeneous powder, free from visible extraneous matter and hard aggregates. It shall wet readily on mixing with water, providing a suspension suitable for use as spray.

3.3 The material shall also comply with the requirements given in Table 1.

3.3.1 When determined by the method prescribed in Annex A of IS 12005 : 1987, the observed deltamethrin content, percent (*m/m*) of any of the samples shall not differ from the declared nominal value by more than tolerance limits indicated below:

Nominal Value, Percent	*Tolerance Limit, Percent*
Up to 9	+ 10 } − 5 }
Above 9 and below 50	± 5 } of the nominal value
50 and above	+ 5 } − 3 }

4 PACKING

The material shall be packed in 300 g capacity LDPE bags of thickness not less than 0·062 mm, which then be packed in HMHDPE or mild steel containers provided with LDPE liners of thickness not less than 0·062 mm.

5 MARKING

The containers shall bear legibly and indelibly the following information in addition to the information as is necessary under the *Insecticides Act*, 1968 and Rules framed thereunder:

a) Name of the material;
b) Indication of the source of manufacture;
c) Date of manufacture and date of expiry;
d) Batch number;
e) Net mass of contents;
f) Nominal deltamethrin content, percent (*m/m*); and
g) The cautionary notice worded as in *Insecticides Act*, 1968 and Rules.

6 SAMPLING

When a bulk quantity of the material is offered for inspection, representative samples of the material shall be drawn as prescribed in IS 10627 : 1983 and tested within 90 days of its manufacturing. The criteria for conformity shall be as given in IS 10627 : 1983. However,

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Table 1 Requirements for Deltamethrin WP

(*Clause* 3.3)

Sl No.	Characteristic	Requirement	Method of Test, Ref to	
			Annex of IS 12005 : 1987	Cl No. of IS 6940 : 1982
(1)	(2)	(3)	(4)	(5)
i)	Deltamethrin content, percent by mass	Nominal value as declared on the container (*see* 3.3.1)	B	—
ii)	Sieving, after accelerated storage (material passing through 45-micron IS Sieve), percent by mass, *Min* [*see* IS 460 (Part 1) : 1985] (*see* Note also)	99·0	—	11.1
iii)	Suspensibility, after accelerated storage, percent by mass, *Min* (*see* Note)	75·0	—	11.2
iv)	Acidity (as H_2SO_4), percent by mass, *Max*	0·5	—	11.3
	or			
	Alkalinity (as NaOH), percent by mass, *Max*	0·5	—	11.3
v)	Wettability in seconds, *Max*	120	—	11.4

NOTE — The material need not be subjected to accelerated storage treatment if it has crossed half of its shelf-life as ascertained from its dates of manufacture and expiry declared on the container.

when the material is offered for inspection after 90 days of its manufacturing, sampling shall be done according to IS 10627 : 1983 and the criteria for conformity of the material when tested, shall be the limits of tolerances, as applicable over the declared nominal value, given under **3.3.1** of this standard.

7 TESTS

7.1 Tests shall be carried out by the methods referred to in col 4 and 5 of Table 1 and **7.2**.

7.2 Suspensibility Test

7.2.1 For carrying out suspensibility test, weigh to the nearest one mg into a 100-ml beaker a amount of the treated sample to form 250 ml of suspension to contain 0·05 g/l of deltamethrin and proceed as described in **11.2.3.2** of IS 6940 : 1982.

7.2.2 After conducting suspensibility test, transfer the bottom 25 ml of suspension and sediment quantitatively into a 50-ml volumetric flask, rinsing several times with acetonitrile. Dilute to the mark. Filter rapidly through a G4 Gooch crucible to avoid any loss of solvent or centrifuge. Take the extract for determination of deltamethrin content as described in Annex A of IS 12005 : 1987.

7.3 Quality of Reagents

Unless specified otherwise, pure chemicals and distilled water (*see* IS 1070 : 1977) shall be employed in tests.

NOTE — 'Pure chemicals' shall mean chemicals that do not contain impurities which affect the results of analysis.

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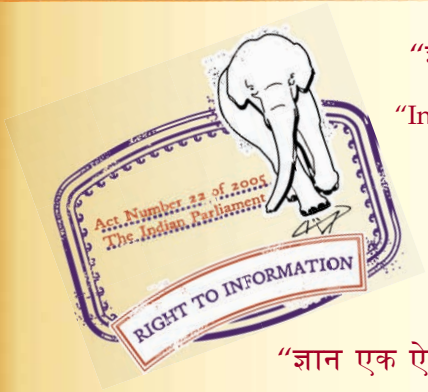

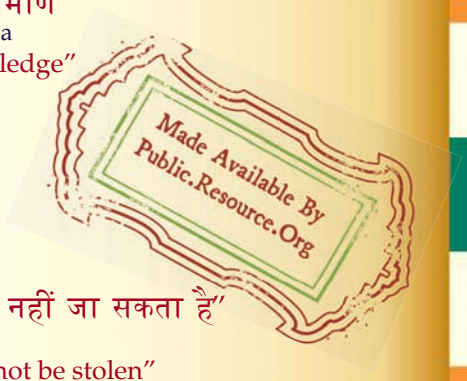

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Indian Standard

ALPHACYPERMETHRIN, WP — SPECIFICATION

ICS 65.100.10

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October 2005 17 **Price Group 1**

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FOREWORD

This Indian Standard was adopted by the Bureau of Indian Standards, after the draft finalized by the Pesticides and Pesticides Residue Analysis Sectional Committee had been approved by the Food and Agriculture Division Council.

Alphacypermethrin, WP is used as an insecticidal formulation.

The material is generally manufactured to contain 5 percent (*m/m*) of alphacypermethrin, technical.

In the preparation of this standard, due consideration has been given to the provisions of the *Insecticides Act*, 1968 and the Rules framed thereunder. However, this standard is subject to the restrictions imposed under the Act and Rules wherever applicable.

For the purpose of deciding whether a particular requirement of this standard is complied with, the final value, observed or calculated, expressing the result of a test or analysis, shall be rounded off in accordance with IS 2 : 1960 'Rules for rounding off numerical values (*revised*)'. The number of significant places retained in the rounded off value should be the same as that of the specified value in this standard.

Indian Standard

ALPHACYPERMETHRIN, WP — SPECIFICATION

1 SCOPE

This standard prescribes the requirements and the methods of sampling and test for alphacypermethrin, WP.

2 REFERENCES

The following standards contain provisions which through reference in this text, constitute provisions of this standard. At the time of publication, the editions indicated were valid. All standards are subject to revision and parties to agreements based on this standard are encouraged to investigate the possibility of applying the most recent editions of the standards indicated below:

IS No.	*Title*
460 (Part 1) : 1985	Specification for test sieves: Part 1 Wire cloth test sieves (*third revision*)
1070 : 1992	Water for general laboratory use (*third revision*)
6940 : 1982	Methods of tests for pesticides and their formulations (*first revision*)
8190 (Part 1) : 1988	Requirement for packing of pesticides: Part 1 Solid pesticides (*second revision*)
10627 : 1983	Methods for sampling of pesticides formulations
15616 : 2005	Alphacypermethrin, technical — Specification

3 REQUIREMENTS

3.1 Constituents

3.1.1 The material shall consist of a homogeneous mixture of alphacypermethrin, technical together with filler(s) and other necessary formulant(s) and with or without stabilizer(s).

3.1.2 Alphacypermethrin, technical employed in the formulation of this material shall conform to IS 15616.

3.2 Description

3.2.1 The material shall be in the form of a homogeneous powder, free flowing, whitish powder that wets readily on mixing with water.

3.2.2 *Sieving Requirement*

When determined by the method specified in that of IS 6940, the amount of material passing through 75 micron IS sieve [IS 460 (Part 1)] should not be less than 98 percent by mass.

3.2.3 *Suspensibility Test*

The suspensibility when determined by the method prescribed in Annex A shall be minimum 70 percent by mass.

3.2.4 *Wettability*

The time when the whole material gets completely submerged in water should not exceed 120 seconds when tested by the method specified in **11.4** of IS 6940.

3.3 Chemical

3.3.1 *Alphacypermethrin Content*

When determined by the method prescribed [Method A of IS 15616], the observed alphacypermethrin content, percent (*m/m*), of any of the samples shall not differ from the declared nominal value by more than the percent tolerance limits indicated below:

Nominal Value Percent	*Tolerance Limit* Percent	
Up to 9	+ 10 − 5	of the nominal value
Above 9 and below 50	± 5	
50 and above	+ 5 − 3	

3.3.1.1 The actual value of alphacypermethrin content in the formulations shall be calculated to the second decimal place and then rounded off to the first decimal place before applying the tolerance given in **3.3.1.**

3.3.1.2 The average alphacypermethrin content of all samples taken shall not be less than the declared nominal content.

3.3.2 *Acidity or Alkalinity*

When determined by the method prescribed in IS 6940 the acidity (calculated as H_2SO_4) or alkalinity (calculated as NaOH) of the material shall be maximum 0.15 percent *w/w*.

4 PACKING

The material shall be packed according to the general requirements given in IS 8190 (Part 1).

5 MARKING

5.1 The containers shall bear legibly and indelibly the following information in addition to the information as is necessary under the *Insecticides Act*, 1968 and Rules framed thereunder:

a) Name of the material;

b) Name and address of the manufacturer;

c) Batch number;

d) Date of manufacture;

e) Date of expiry;

f) Net mass of contents;

g) Nominal alphacypermethrin content, percent (*m/m*);

h) The cautionary notice as worded in *Insecticides Act*, 1968 and Rules framed thereunder; and

j) Any other information required under the *Standards of Weights and Measures (Packaged Commodities) Rules*, 1977.

5.2 BIS Certification Marking

The product may also be marked with the Standard Mark.

5.2.1 The use of the Standard Mark is governed by the provisions of the *Bureau of Indian Standards Act*, 1986 and the Rules and Regulations made thereunder. The details of conditions under which the licence for the use of the Standard Mark may be granted to manufacturers or producers may be obtained from the Bureau of Indian Standards.

6 SAMPLING

When freshly manufactured material in bulk quantity and/or the retail pack of the formulated product is/are offered for inspection, representative sample of the material shall be drawn and tested as prescribed in IS 10627 and if tested within 90 days of its date of manufacture, the criteria for conformity shall be the contents in percent (*m/m*), shall not be less than the declared nominal value. The upper limit for conformity shall be the same as those given in **3.3.1**.

When the material is offered for inspection after 90 days of its manufacture, sampling shall be done as prescribed in IS 10627, however, the criteria for conformity of the material, when tested, shall be the limits of tolerances, as applicable over the declared nominal value and given under **3.3.1**.

7 TESTS

7.1 Tests shall be carried out by the methods referred to in **3.2.2** to **3.2.4** and **3.3.1** to **3.3.2**.

7.2 Quality of Reagents

Unless specified otherwise, pure chemicals and distilled water (*see* IS 1070) shall be employed in tests.

NOTE — 'Pure chemicals' shall mean chemicals that do not contain impurities, which affect the results of analysis.

ANNEX A

(*Clause* 3.2.3)

DETERMINATION OF SUSPENSIBILITY

A-1 PROCEDURE

Weigh 4.5 g of WP and carry out suspensibility as per IS 6940.

Proceed with the retained one tenth of the suspension, including the sediment for the determination of active ingredient, as follows:

Filter the sediment including suspension using distilled water by suction. Quantitatively transfer the sediment into 100 ml volumetric flask initially with the help of small quantities of toluene (up to 25 ml) and then with the mobile phase being used for determination of the active ingredient described in Annex A of IS 15616. Add 10 ml of internal standard by pipette. Make up the volume upto the mark using mobile phase. Mix well to ensure complete dissolution of alphacypermethrin present in the sediment. Filter through a suitable disc filter.

Determine alphacypermethrin content of the filtered solution by HPLC as described in Annex A of IS 15616.

A-2 CALCULATION

$$\text{Suspensibility percent} = \frac{1\,000\,(M - m)}{9 \times M}$$

where

M = mass of alphacypermethrin present in sample used for test (calculated from mass of sample and its percent alphacypermethrin content), in g; and

m = mass of alphacypermethrin found in suspension including the sediment remaining in the graduated cylinder, in g.

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IS 14158 (1994): Cyfluthrin WP [FAD 1: Pesticides and Pesticides Residue Analysis]

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Indian Standard

CYFLUTHRIN WP — SPECIFICATION

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AMENDMENT NO. 1 DECEMBER 1995
TO
IS 14158 : 1994 CYFLUTHRIN WP — SPECIFICATION

(*Foreword, paras* 2 *and* 3) — Substitute the following for the existing:

'Cyfluthrin WP is used in the control of pests of household and public health importance.

Cyfluthrin WP is generally manufactured to contain 10 percent (*m/m*) cyfluthrin.'

(*Page* 1, *clause* 3.1.1) — Substitute 'cyfluthrin technical' *for* 'cyfluthrin, technical'.

[*Page* 1, *Table* 1, *Sl No.* (i), *col* 3] — Substitute '(*see* 3.4)' *for* '(*see* 3.4 and 7.2)'.

[*Page* 1, *Table* 1, *Sl No.* (iii), *col* 4] — Substitute '7.2 and B' *for* 'B'.

(FAD 1)

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Pesticides Sectional Committee, FAD 1

FOREWORD

This Indian Standard was adopted by the Bureau of Indian Standards, after the draft finalized by the Pesticides Sectional Committee had been approved by the Food and Agriculture Division Council.

Simazine WP is used as a herbicide.

Simazine WP is generally manufactured to contain 50 percent (*m/m*) of simazine.

In the preparation of this standard, due consideration has been given to the provisions of the *Insecticides Act*, 1968 and the Rules framed thereunder and *Standards of Weights and Measures (Packaged Commodities) Rules, 1977*. However, this standard is subject to the restrictions imposed under the Act and Rules wherever applicable.

For the purpose of deciding whether a particular requirement of this standard is complied with, the final value, observed or calculated, expressing the result of a test or analysis, shall be rounded off in accordance with IS 2 : 1960 'Rules for rounding off numerical values (*revised*)'. The number of significant places retained in the rounded off value should be the same as that of the specified value in this standard.

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Indian Standard

CYFLUTHRIN WP — SPECIFICATION

1 SCOPE

This standard prescribes the requirements and the methods of sampling and test for cyfluthrin WP.

2 REFERENCES

The following Indian Standards are necessary adjuncts to this standard:

IS No.	*Title*
1070 : 1992	Reagent grade water (*third revision*)
6940 : 1982	Methods of test for pesticides and their formulations (*first revision*)
8190 (Part 1) : 1988	Requirement for packing of pesticides: Part 1 Solid pesticides (*second revision*)
10627 : 1983	Methods for sampling of pesticidal formulations
14156 : 1994	Pesticide — Cyfluthrin, technical

3 REQUIREMENTS

3.1 Constituents

3.1.1 The material shall consist of cyfluthrin, technical, together with suitable carrier(s), stabilizer(s) and other formulant(s).

3.1.2 Cyfluthrin, technical employed in the formulation of this material shall conform to IS 14156 : 1994.

3.2 Description

The material shall be in the form of a homogeneous powder, buff in colour and shall wet readily on mixing with water providing a suspension for suitable use as spray. The material shall be free from extraneous matter and/or modifying agents and hard aggregates.

3.3 The material shall also comply with the requirements given in Table 1.

3.4 Cyfluthrin Content

When determined by the method prescribed in Annex A of this standard and IS 14156 : 1994 the observed cyfluthrin content, percent *(m/m)* of any of the samples shall not differ from the declared nominal value by more than the tolerance limits given below.

Table 1 Requirements for Cyfluthrin WP
(*Clause* 3.3)

Sl No.	Characteristic	Requirement	Method of Test, Ref to	
			Annex of this Standard	Clause of IS 6940 : 1982
(1)	(2)	(3)	(4)	(5)
i)	Cyfluthrin, content, percent by mass (*m/m*)	Nominal value as declared on the container (*see* 3.4 and 7.2)	A	—
ii)	Sieving (material passing through 75-micron IS Sieve), percent by mass (*m/m*), *Min*	98.0	—	11.1
iii)	Suspensibility, percent by mass (*m/m*), *Min*	50.0	B	—
iv)	Acidity (as H_2SO_4), percent by mass, (*m/m*), *Max*	1.0	—	11.3
	OR			
	Alkalinity (as NaOH), percent by mass, (*m/m*), *Max*	0.5	—	11.3
v)	Wettability, in seconds, *Max*	120	—	11.4

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Nominal Value, Percent	*Tolerance Limits, Percent*	
Up to 9	+ 10 − 5	of the nominal value
Above 9 and below 50	± 5	
50 and above	+ 5 − 3	

4 PACKING

The material shall be packed in mild steel drums or fibre board containers lined with polyethylene of thickness not less than 0.062 mm. It shall also conform to the general requirements given in IS 8190 (Part 1) : 1988.

5 MARKING

5.1 The containers shall be securely closed and bear legibly and indelibly the following information and any other information as is necessary under the *Insecticides Act*, 1968 and Rules framed thereunder:

a) Name of the material;

b) Name of the manufacturer;

c) Batch number;

d) Date of manufacture;

e) Date of expiry;

f) Net mass of the contents;

g) Cyfluthrin content, percent (*m/m*);

h) Cautionary notice worded as in the *Insecticides Act*, 1968 and Rules framed thereunder; and

j) Any other information required under the *Standards of Weights and Measures (Packaged Commodities) Rules*, 1977.

5.2 BIS Certification Marking

The product may also be marked with Standard Mark.

5.2.1 The use of the Standard Mark is governed by the provisions of *Bureau of Indian Standards Act, 1986* and the Rules and Regulations made thereunder. The details of conditions under which the licence for the use of Standard Mark may be granted to manufacturers or producers may be obtained from the Bureau of Indian Standards.

6 SAMPLING

When freshly manufactured material is offered for inspection, representative samples shall be drawn and tested as prescribed in IS 10627 : 1983, within 90 days of its manufacturing. When the material is offered for inspection after 90 days of its manufacturing, sampling shall be done as prescribed in IS 10627 : 1983. However, the criteria for conformity of the material when tested, shall be the limits of tolerances, as applicable over the declared nominal value and given under 3.4 of this standard.

7 TESTS

7.1 Tests shall be carried out by the appropriate methods referred to in 3.3, 7.2 and col 4 and 5 of Table 1.

7.2 For carrying suspensibility test start with 1.25 percent (*m/m*) of concentration. Transfer quantitatively 25 ml portion of suspension and sediment to a 250-ml separating funnel and proceed as described in Annex B.

7.3 Quality of Reagents

Unless specified otherwise, pure chemicals and distilled water (*see* IS 1070 : 1992) shall be employed in tests.

NOTE — 'Pure chemicals' shall mean chemicals that do not contain impurities which affect the results of analysis.

ANNEX A

[*Clause* 3.3; *Table* 1, *Item* (i)]

DETERMINATION OF CYFLUTHRIN CONTENT

A-1 PROCEDURE

Weigh accurately a quantity of sample so as to contain 0.5 g of cyfluthrin (5 g for cyfluthrin 10 WP) into a 100-ml beaker. Stir 4 times adding 20 ml acetone and filter under vacuum through a G4 crucible containing a bed of a filter aid. Take 5 ml of aliquot into 50-ml volumetric flask and add 5 ml of the internal standard solution prepared as described in IS 14156 : 1994. Make up the volume up to the mark with acetone and shake well to homogenize. Proceed for the estimation of cyfluthrin content as described in IS 14156 : 1994.

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ANNEX B

(*Clause* 7.2)

DETERMINATION OF SUSPENSIBILITY

B-1 METHOD

B-1.1 Weigh out accurately an amount of sample to form a suspension containing 1.25 percent of cyfluthrin 10 WP. Add 30 ml of standard hard water and proceed as described in 11.2 of IS 6940 : 1982.

B-1.2 Transfer the bottom 25 ml of the suspension in B-1.1 quantitatively into a 100-ml separating funnel using 25 ml of ether for washing the cylinder. Extract the cyfluthrin 2 times with 25 ml of each of ether. Filter the ether extracts under vacuum through a G4 crucible containing a bed of anhydrous sodium sulphate directly into a 100-ml conical flask. Evaporate the ether on a water bath. Dissolve the residue in acetone in a 100-ml volumetric flask add 5 ml of the internal standard solution prepared as described in IS 14156 : 1994. Make up the volume to the mark with acetone. Shake well to homogenize. Proceed further as described in IS 14156 : 1994.

B-2 CALCULATION

Mass in g of cyfluthrin in the suspension including the sediment $= \frac{A_3 \times A_2 \times m_1}{A_4 \times A_1 \times 100} \times P$

where

A_1 = peak area of cyfluthrin in standard solution;

A_2 = peak area of cyfluthrin in sample solution;

A_3 = peak area of internal standard in standard solution;

A_4 = peak area of internal standard in sample solution;

m_1 = mass, in g, of cyfluthrin in standard solution; and

P = percent purity of cyfluthrin reference standard.

Suspensibility, percent by mass $= \frac{1\,000\,(M - m)}{9\,M}$

where

M = mass, in g, of cyfluthrin present in the sample taken for the test.

m = mass, in g, of cyfluthrin percent in the suspension including the sediment (B-1.2).

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IS 14510 (1997): Lambda-cyhalothrin WP [FAD 1: Pesticides and Pesticides Residue Analysis]

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Indian Standard

LAMBDA-CYHALOTHRIN WP — SPECIFICATION

ICS 65.100

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BUREAU OF INDIAN STANDARDS
MANAK BHAVAN, 9 BAHADUR SHAH ZAFAR MARG
NEW DELHI 110002

December 1997

Price Group 2

Pesticides Sectional Committee , FAD 1

FOREWORD

This Indian Standard was adopted by the Bureau of Indian Standards, after the draft finalized by the Pesticides Sectional Committee had been approved by the Food and Agriculture Division Council.

Lambda-cyhalothrin WP is used for control of pests relating to public health.The product is registered under the provisions of *Insecticides Act*, 1968 and *Rules* framed thereunder.

In the preparation of this standard, due consideration has been given to the provisions of the *Insecticides Act*, 1968 and the *Rules* framed thereunder and *Standards of Weights and Measures (Packaged Commodities) Rules*, 1977. However, this standard is subject to the restrictions imposed under these wherever applicable.

For the purpose of deciding whether a particular requirement of this standard is compiled with , the final value, observed or calculated , expressing the result of a test or analysis , shall be rounded off in accordance with IS 2 : 1960 'Rules for rounding off numerical values *(revised)*'. The number of significant places retained in the rounded off value should be the same as that of the specified value in this standard.

Indian Standard

LAMBDA-CYHALOTHRIN WP — SPECIFICATION

1 SCOPE

This standard prescribes the requirements and the method of sampling and test for lambda-cyhalothrin wettable powder (WP).

2 REFERENCES

The following standards contain provisions which through reference in this text, constitute provision of this standard. At the time of publication, the editions indicated were valid. All standards are subject to revision and parties to agreements based on this standard are encouraged to investigate the possibility of applying the most recent editions of the standards indicated below:

IS No.	*Title*
460 (Part 1) : 1985	Test sieves : Part 1 Wire cloth test sieve (*third revision*)
1070 : 1992	Reagent grade water (*third revision*)
6940 : 1982	Methods of test for pesticides and their formulations (*first revision*)
8190 (Part 3) : 1979	Requirement for packing of pesticides : Part 3 Household pesticides (*second revision*)
10627 : 1983	Methods for sampling of pesticidal formulations
14509 : 1997	Lambda-cyhalothrin technical—Specification

3 REQUIREMENT

3.1 Constituents

3.1.1 The material shall consist of lambda-cyhalothrin technical together with suitable carrier(s), stabilizer(s) and other formulant(s).

3.1.2 Lambda-cyhalothrin technical employed in the manufacture of the material, shall conform to IS 14509.

3.2 Description

The material shall be fine, free flowing, off white to pale yellow brown homogeneous powder. The material shall be free from visible extraneous matter and hard aggregates and shall wet readily on stirring with water providing a suspension suitable for use as a spray.

3.3 The material shall also comply with the requirements given in Table 1.

Table 1 Requirement for Lambda-Cyhalothrin WP

Sl No.	Characteristics	Requirement	Method of Test, Ref to	
			Annex of this Standard	Cl No. of IS 6940
(1)	(2)	(3)	(4)	(5)
i)	Lambda-cyhalothrin content, percent by mass	Nominal value as declared on the label [*see* 3.3.1 and 5.1 (g)]	A	—
ii)	Material passing through 75 micron IS sieve [*see* IS 460 (Part 1)] percent by mass, *Min*	98.0	—	11.1
iii)	Suspensibility, percent by mass, *Min*	50.0	B	—
iv)	Wettability in seconds, *Max*	120	—	11.4
v)	Acidity (as H_2SO_4), percent by mass, *Max*	1.0	—	11.3.2
	OR			
	Alkalinity (as NaOH), percent by mass, *Max*	1.0	—	11.3.3

3.3.1 When determined by the method prescribed in Annex A, the observed lambda-cyhalothrin content, percent by mass of any of the samples shall not differ from the declared nominal value by more than tolerance limits indicated below:

Nominal Value, Percent	*Tolerance Limit,* Percent
Up to 9	+10 −5
Above 9 and below 50	±5
50 and above	+5 −3

4 PACKING

The material shall be packed in water soluble polyvinyl alcohol sachet or aluminium foil laminate sachet.The bulk quantity shall be packed in mild steel drum. It shall also conform to the general requirements given in IS 8190 (Part 3).

5 MARKING

5.1 The container shall be marked legibly and indelibly with the following information:

a) Name of the material;
b) Name and address of the manufacturer;
c) Batch No. or code number ;
d) Date of manufacture;
e) Date of expiry;
f) Net mass of contents;
g) Nominal lambda-cyhalothrin content, percent by mass, as registered under the *Insecticides Act*, 1968 and *Rules* framed thereunder; and
h) Any other information as required under the *Insecticides Act*, 1968 and *Rules* framed thereunder and *Standards of Weights and Measures (Packaged Commodities) Rules*, 1977.

5.2 BIS Certification Marking

The product may also be marked with the Standard Mark.

5.2.1 The use of the Standard Mark is governed by the provisions of *Bureau of Indian Standards Act*, 1986 and the Rules and Regulations made thereunder. The details of conditions under which the licence for the use of Standard Mark may be granted to manufacturers or producers may be obtained from the Bureau of Indian Standards.

6 SAMPLING

When freshly manufactured material is offered for inspection, representative samples of the materials shall be drawn as prescribed in IS 10627 and tested within 90 days of manufacture. The criteria for conformity shall be as given in IS 10627. However, when the material is offered for inspection after 90 days of its manufacture, sampling shall be done according to IS 10627 and the criteria for conformity of the material when tested, shall be the limits of tolerances, as applicable over the declared nominal value, given under 3.3.1 of this standard.

7 QUALITY OF REAGENT

Unless specified otherwise, pure chemicals and distilled water (*see* IS 1070) shall be employed in various tests.

NOTE — 'Pure chemicals' shall mean chemicals that do not contain impurities which affect the results of analysis.

ANNEX A

[*Table* 1, *Sl No.* (i)]

DETERMINATION OF LAMBDA-CYHALOTHRIN CONTENT

A-1 PROCEDURE

Weigh accurately sufficient sample to contain 0.05 g equivalent lambda-cyhalothrin into a 150 ml conical flask. Add 20 ml of chloroform by pipette to the flask and shake thoroughly for 5-10 minutes to dissolve the lambda-cyhalothrin. Allow the insoluble material to settle and filter the supernatant liquid through an appropiate filter paper. Take the filtrate into 50 ml volumetric flask and 10 ml of the internal standard solution prepared as desired in IS 14509 . Make up the volume up to the mark with chloroform and shake well to homogenize. Proceed for the estimation of lambda-cyhalothrin as described in IS 14509.

ANNEX B

[*Table* 1, *Sl No.* (iii)]

DETERMINATION OF SUSPENSIBILITY

B-1 METHOD

B-1.1 Weigh accurately into a 100 ml beaker, an amount of the sample which could form 250 ml of suspension containing 0.05 g of active ingredient. Add a volume of standard hard water at 30 ±1°C equal to at least twice the mass of the sample taken for test and proceed as described in 11.2 of IS 6940.

B-1.2 Transfer the bottom one-tenth of suspension from the suspensibility test quantitatively to a 250 ml glass-stoppered separating funnel. Use a maximum volume of 25 ml of distilled water to rinse the 250 ml graduated cylinder and combine the suspension and washings. Add 25 ml of dichloromethane to the separating funnel, stopper, and shake for 1 min. Formation of an emulsion at this stage may be overcome by adding 1 g of sodium chloride crystals to the aqueous layer reshaking the contents of the funnel. Run the separating dichloromethane layer through phase-separating paper into a clean, dry 250 ml round bottom flask. Repeat the extraction with a further three 25 ml aliquat of dichloromethane, combining all four extracts. Remove the dichloromethane under reduced pressure at 60°C using a rotary evaporator and dissolve the residue in a 250 ml flask in 2 ml of internal standard solution, and make up to 25 ml with chloroform and proceed as described in IS 14509.

B-2 CALCULATION

Mass in g of lambda-cyhalothrin in the suspension including the sediment (m)

$$= \frac{A_3 \times A_2 m_1}{A_4 \times A_1 \times 100} \times P$$

where

A_1 = peak area of lambda-cyhalothrin in standard solution;

A_2 = peak area of lambda-cyhalothrin in sample solution;

A_3 = peak area of internal standard in standard solution;

A_4 = peak area of internal standard in sample solution;

m_1 = mass, in g, of lambda-cyhalothrin in standard solution; and

P = percent purity of lambda-cyhalothrin reference standard.

$$\text{Suspensibility, percent by mass} = \frac{1\,000\,(M - m)}{9M}$$

where

M = mass, in g, of lambda-cyhalothrin present in the sample taken for the test; and

m = mass, in g, of lambda-cyhalothrin present in the suspension including sediment.

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IS 15939 (2011): Pesticide - Bifenthrin Wettable Powder
[FAD 1: Pesticides and Pesticides Residue Analysis]

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Indian Standard

PESTICIDE — BIFENTHRIN WETTABLE POWDER — SPECIFICATION

ICS 65.100.10

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FOREWORD

This Indian Standard was adopted by the Bureau of Indian Standards, after the draft finalized by the Pesticides and Pesticides Residues Analysis Sectional Committee had been approved by the Food and Agriculture Division Council.

Bifenthrin wettable powder (WP) is used as an insecticidal formulation. It is generally manufactured to contain 10 percent (*m/m*) of bifenthrin.

In the preformulation of this standard, due consideration has been given to the provisions of *Insecticides Act*, 1968 and the Rules framed thereunder. However, this standard is subject to the restrictions imposed under the *Insecticides Act* and Rules, wherever applicable.

For the purpose of deciding whether a particular requirement of this standard is complied with, the final value, observed or calculated, expressing the result of a test or analysis, shall be rounded off in accordance with IS 2 : 1960 'Rules for rounding off numerical values (*revised*)'. The number of significant places retained in the rounded off value should be the same as that of the specified value in this standard.

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Indian Standard

PESTICIDE — BIFENTHRIN WETTABLE POWDER — SPECIFICATION

1 SCOPE

This standard prescribes the requirements and the methods of sampling and test for bifenthrin, WP.

2 REFERENCES

The following standards contain provisions which through reference in this text, constitute provisions of this standard. At the time of publication, the editions indicated were valid. All standards are subject to revision and parties to agreements based on this standard are encouraged to investigate the possibility of applying the most recent editions of the standards indicated below:

IS No.	*Title*
1070 : 1992	Reagent grade water (*third revision*)
6940 : 1982	Methods of test for pesticides and their formulations (*first revision*)
8190 (Part 1) : 1988	Requirement for packing of pesticides: Part 1 Solid pesticides (*second revision*)
10627 : 1983	Methods for sampling of pesticidal formulations
15936 : 2010	Pesticide — Bifenthrin, technical — Specification

3 REQUIREMENTS

3.1 Constituents

3.1.1 The material shall consist of bifenthrin technical, together with suitable carrier(s), stabilizer(s), binder(s), and other formulant(s).

3.1.2 Bifenthrin technical, employed in the formulation of this material shall conform to IS 15936.

3.2 Description

The material shall be in the form of a fine, free flowing, beige or off-white to brownish white homogeneous powder, free from lumps and extraneous impurities. It shall wet readily on mixing with water providing a suspension for suitable use as spray.

3.3 The material shall also comply with the requirements given in Table 1.

3.4 Bifenthrin Content

When determined by the method described in Annex A, the observed bifenthrin content percent (*m/m*) of any of the samples shall not differ from the declared nominal value by more than the tolerance limits given below:

Nominal Value Percent	*Tolerance Limits* Percent	
Up to 9	+10 – 5	of the nominal value
Above 9 and below 50	± 5	
50 and above	+5 –3	

4 PACKING

The material shall be packed in polyethylene pouches. Bulk quantity shall be packed in mild steel drums or fibre board containers lined with polyethylene liner. Closures provided shall be such as not to allow any materials to leak through them. These shall be leak proof and pilfer proof. In addition, the packing shall also comply with the general requirements as specified in IS 8190 (Part 1).

Table 1 Requirements for Bifenthrin, WP
(*Clause* 3.3)

Sl No.	Tests	Requirements	Methods of Test, Ref to	
			Annex of this Standard	Annex/Clause of IS No.
(1)	(2)	(3)	(4)	(5)
i)	Bifenthrin content, percent by mass	Nominal value as declared on the container (*see* **3.4**)	—	Annex A of IS 15936
ii)	Sieve test (particle retained on 300 mesh)	Maximum 3.0 percent (*w/w*)	—	11.1 of IS 6940
iii)	Wettability, in seconds, *Max*	120	—	11.4 of IS 6940
iv)	*p*H of 5 percent suspension in distilled water	7.0 to 9.0	A	—
v)	Alkalinity (as NaOH), percent by mass, *Max*	0.3	—	11.3 of IS 6940
vi)	Suspensibility, percent by mass, *Min*	60.0	—	11.2 of IS 6940

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5 MARKING

5.1 The container shall be marked legibly and indelibly with the following information and other additional information, as is required under the *Insecticides Act*, 1968, and Rules framed thereunder:

a) Name of the material;
b) Name and address of the manufacturer;
c) Batch number or Code number;
d) Date of manufacture;
e) Date of expiry;
f) Nominal bifenthrin content, percent (*m/m*);
g) Net quantity;
h) A cautionary notice as worded in *Insecticides Act*, 1968 and Rules framed thereunder; and
j) Any other information required under *Standards of Weights and Measures (Packaged Commodities) Rules*, 1977.

5.2 BIS Certification Marking

The product may also be marked with the Standard Mark.

5.2.1 The use of the Standard Mark is governed by the provisions of the *Bureau of Indian Standards Act*, 1986 and the Rules and Regulations made thereunder. The details of the conditions under which the licence for the use of the Standard Mark may be granted to manufacturers or producers may be obtained from the Bureau of Indian Standards.

6 SAMPLING

6.1 When freshly manufactured material in bulk quantity and/or the retail pack of the formulated product is/are offered for inspection, representative sample of the material shall be drawn as prescribed in IS 10627 and if tested within 90 days of its date of manufacture, the criteria for conformity shall be the contents in percent (*m/m*), shall not be less than the declared nominal value. The upper limit for conformity shall be the same as those given in **3.4**.

6.2 When the material is offered for inspection after 90 days of its manufacture, sampling shall be done as prescribed in IS 10627, however, the criteria for conformity of the material, when tested, shall be the limits of tolerances, as applicable over the declared nominal value and given under **3.4**.

7 QUALITY OF REAGENTS

Unless specified otherwise, pure chemicals and distilled water (*see* IS 1070) shall be employed in tests.

NOTE — 'Pure chemicals' shall mean chemicals that do not contain impurities which affect the results of analysis.

ANNEX A

[*Clause* 3.4; and *Table* 1, *Sl No.* (iv)]

DETERMINATION OF *p*H IN BIFENTHRIN WETTABLE POWDER

A-1 GENERAL

This procedure is applicable for aqueous suspensions of wettable powder.

A-2 PRINCIPLE

The *p*H is determined using a *p*H meter having a range of 0-14 with a precision of 0.1 *p*H.

A-3 APPARATUS

A-3.1 *p*H Meter — Direct reading, with glass electrode and a calomel reference electrode or any other suitable electrode along with temperature compensation.

A-3.2 Balance (Analytical) — Sensitive to 0.1 g.

A-3.3 Buffer Tablets — Tablets of *p*H 4.0, 7.0 and 9.2.

A-3.4 Standard Glassware Beaker

A-3.5 Wash Bottle — Containing distilled water.

A-4 PROCEDURE

From the buffer tablets, prepare 4.0, 7.0 and 9.2 *p*H buffer solutions, following the prescribed instruction given with the tablets.

Standardize the *p*H meter using the buffers as follows:

Immerse the electrodes of the *p*H meter in 7.0 *p*H buffer solution and adjust the meter to read 7.0 *p*H. Remove the buffer solution from the electrodes, wash these with water and wipe the electrodes free from water.

Replace with *p*H buffer solution 9.2 and adjust the meter to read 9.2 *p*H. Remove the buffer solution from the electrodes, wash these with water and wipe the electrodes free from water.

Weigh accurately about 5.0 g of the sample and add 100 ml of distilled water. Mix the sample thoroughly to get a uniform suspension in a beaker. Measure the *p*H of the suspension.

Report result to nearest 0.1 *p*H.

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