

	ACCREDITATION DOCUMENT	F-06/02 Issue Date: 18/08/20 Rev. No: 09 LAB 238
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Accreditation No: LAB 238

Awarded to

Micronutrient Testing Laboratory
2-KM, 21-KM Off Ferozpur Road, West Rohinala, Kahna,
Four Brothers Chemicals (Pvt.) Limited.
Lahore, Pakistan.

The scope of accreditation is in accordance with the standard specifications outlined in the following page(s) of this document. The accredited scope shall be visible and legible in areas such as customer service, sample-receiving section etc and shall not mislead its users.

The accreditation was first time granted on **29.01.2016** by Pakistan National Accreditation Council.

The laboratory complies with the requirements of **ISO/IEC 17025:2017**.

The accreditation requires regular surveillance, and is valid until **28.01.2022**.

The decision of accreditation made by Pakistan National Accreditation Council implies that the organization has been found to fulfill the requirements for accreditation within the scope.

The organization however, itself is responsible for the results of performed measurements/tests.

PAKISTAN NATIONAL ACCREDITATION COUNCIL

01-07-2021

Date

-Sd-

Director General

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Testing Laboratory.

Accreditation Scope of
Micronutrient Testing Laboratory
Four Brothers Chemicals (Pvt.) Limited.
Lahore, Pakistan.

Permanent laboratory premises

Micronutrient Testing Laboratory

Materials / Products tested	Testing field (e.g. environmental testing or mechanical testing)	Types of test/ Properties measured	Reference to standardized method (e.g. ISO 14577- 1:2003)/ Internal method reference
Zinc Sulphate Liquid 10%	Chemical Testing on AAS	Quantitative Determination of Zinc Active Ingredient	4B-STM(P)-126 Ref: Mohawk College of Chemical, Environmental and Bio-Technological Department. Professor Cindy Mehlenbacher and Bill Rolfe (Chief Technologist)
NPK 8:8:6	Chemical Testing on Kjeldhal	Quantitative Determination of {Nitrogen (N)} Active Ingredient	4B-STM(P)-125 Ref: Tandon HLS (Ed.) 2009. Methods of Analysis of Soils, Plants, Waters, Fertilizer and Organic Manures. Fertilizer Development and Consultation Organization, New Delhi. Pp 161-162 Official Methods of Analysis of AOAC International, 18th Edition, 2005, Current through Revision, 4, 2011. Method No. 2.4.10 (AOAC Official Method 892.01), Fertilizers Chapter 2 Page 16.
NPK 8:8:6	Chemical Testing through Titration Method	Quantitative Determination of {Phosphorus (P ₂ O ₅)} Active Ingredient	4B-STM(P)-125 Ref: Pakistan standard for Single Super Phosphate (2 nd edition) PS: 67-1996. PSQCA. Karachi Vogel's Text book of quantitative chemical analysis 6 th edition, Pearson education, India

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Tash-36	Chemical Testing through Titration Method	Quantitative Determination of {Phosphorus (P ₂ O ₅)} Active Ingredient	4B-STM(P)-139 Ref: Pakistan standard for Single Super Phosphate (2 nd edition) PS: 67-1996. PSQCA. Karachi Vogel's Text book of quantitative chemical analysis 6 th edition, Pearson education, India
NPK 8:8:6	Chemical Testing on Flame Photometer	Quantitative Determination of {Potash (K ₂ O)} Active Ingredient	4B-STM(P)-125 Ref: Testing Methods for Fertilizers (2013). Incorporated Administrative Agency. Food and Agricultural Materials Inspection Center. Japan. Standard operating manual of instrument. (Potash), India
Humic Acid (10% + Potash (3.5%))	Chemical Testing on Flame Photometer	Quantitative Determination of {Potash (K ₂ O)} Active Ingredient	4B-STM(P)-127 Ref: Testing Methods for Fertilizers (2013). Incorporated Administrative Agency. Food and Agricultural Materials Inspection Center. Japan. Standard operating manual of instrument. (Potash), India
Boron 05%	Chemical Testing on Spectrophotometer	Quantitative Determination of Active Ingredient	In House Validated Test method
Organic Matter Determination	Chemical Testing	Quantitative Determination of Active Ingredient	4B-STM(P)-142 Tandon HLS(Ed) 2009, Methods of Analysis of Soil, Plant, Water, Fertilizer

01-07-2021

Date

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Director