Accreditation No: LAB 238

Awarded to

Micronutrient Testing Laboratory
Four Brothers Chemicals (Pvt) Limited
2-KM, 21-KM Off Ferozpur Road, West Side Rohinala, Kahna, 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 **27.01.2025.**

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

25/01/2023
Date

SD
Director General

Testing Laboratory.

Accreditation Scope of Quality Control Laboratory, Four Brothers Chemicals (Pvt) Limited, 2-KM, 21-KM Off Ferozpur Road, West Side Rohinala, Kahna, Lahore, Pakistan

Permanent laboratory premises X

Micronutrient Laboratory Section

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
Tash-36	Chemical Testing through Titration Method	Quantitative Determination of {Phosphorus (P_2O_5)} Active Ingredient	4B-STM(P)-139 Ref: Pakistan standard for Single Super Phosphate (2nd edition) PS: 67-1996. PSQCA. Karachi Vogel's Text book of quantitative chemical analysis 6th edition, Pearson education, India
NPK 8:8:6	Chemical Testing on Flame Photometer	Quantitative Determination of {Potash (K_2O)} 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_2O)} 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
NPK 8:8:6	Chemical Testing through Titration Method	Determination of {Phosphorus (P_2O_5)} Active Ingredient	Karachi Vogel's Text book of quantitative chemical analysis 6th edition, Pearson education, India

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
Tash-36	Chemical Testing on Flame Photometer	Quantitative Determination of {Potash (K**2**O)} Active Ingredient	4B-STM(P)-128 Ref: Testing Methods for Fertilizers (2013). Incorporated Administrative Agency. Food and Agricultural Materials Inspection Center. Japan. Standard operating manual of instrument. (Potash), India
Tash-30			4B-STM(P)-139 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 through Gravimetric Method	Quantitative Determination of {Humic-Acid} Active Ingredient	4B-STM(P)-127 Ref: F.J. Stevenson, J. Environ. Quality, 1972, 1, 333. A.K. Fataftah, PhD Thesis, Northeastern University, Boston, 1997. T. L. Senn and A. R. Kingman, A Review of Humus and Humic Acid Research, www.humates.com/methodology.html
Humic Acid (40%) + Potash (07%)			4B-STM(P)-137 Ref: F.J. Stevenson, J. Environ. Quality, 1972, 1, 333. A.K. Fataftah, PhD Thesis, Northeastern University, Boston, 1997. T. L. Senn and A. R. Kingman, A Review of Humus and Humic Acid Research, www.humates.com/methodology.html

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
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 Soild, Plant, Water, Fertilizer

25/01/2023 Sd

Date Director