



## ACCREDITATION DOCUMENT

F-06/02

Issue Date: 18/08/2020

Rev. No: 09

LAB 247

**Accreditation No: LAB 247**

**Awarded to**

**Quality Control Laboratory,  
Nuchem (Pvt.) Ltd.  
187-Industrial Estate, Phase II, Multan,  
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 **28-10-2021** 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 **27-10-2027**.

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**

**10-06-2025**

**Date**

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**Director General**

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### Testing Laboratory.

**Accreditation Scope of Quality Control Laboratory,**  
**Nuchem (Pvt.) Ltd.**  
**187-Industrial Estate, Phase II, Multan,**  
**Pakistan**

**Permanent laboratory premises**

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
<b>Pesticides &amp; Fertilizers</b>	Physical Testing	Density (specific Gravity and Hydrometer) (Quantitative Analysis)	Nuchem/QCL/STM/2 Standard method CIPAC HandBook Volume F (2007) MT 3 / Hydrometer
<b>Pesticides</b>	Physical Testing	Suspensibility (Quantitative Analysis)	Nuchem/QCL/STM/4 CIPAC Hand Book Volume F(2007) MT 15 / Water Bath
<b>Pesticides</b>	Physical Testing	Persistence Foam (Qualitative Analysis)	Nuchem/QCL/STM/17 NLA-PT-T-P-06-08 MT-47
<b>Pesticides &amp; Fertilizers</b>	Physical Testing	Wettability (Qualitative Analysis)	Nuchem/QCL/STM/3 Standard method CIPAC HandBook Volume F (2007) MT 53 / Stop watch
<b>Pesticides</b> (S-Metolachlor)	Chemical Testing	S-Metolachlor (Concentration)  (Quantitative Analysis)	Nuchem/QCL/STM/14 CIPAC 400

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<b>Pesticides</b> (Thiamethoxam)	Chemical Testing	Thiamethoxam (Assay Active / Concentration)  (Quantitative Analysis)	Nuchem/QCL/STM/9 CIPAC 637/TC/M- Hand Book Volume O
<b>Pesticides</b> (Clothianidin)	Chemical Testing	Clothianidin  (Assay Active / Concentration)  (Quantitative Analysis)	Nuchem/QCL/STM/11 CIPAC 738/TC/M- CIPAC Hand Book Volume N
<b>Pesticides</b> (Pyraclostrobin)	Chemical Testing	Pyraclostrobin  (Assay Active / Concentration)  (Quantitative Analysis)	Nuchem/QCL/STM/12 CIPAC 964/TC/M- Hand Book Volume O
<b>Pesticides</b> (Triazophos)	Chemical Testing	Triazophos  (Assay Active / Concentration)  (Quantitative Analysis)	Nuchem/QCL/STM/13 CIPAC 353/TK/M- Hand Book Volume H
<b>Pesticides</b> (Chlorfenapyr)	Chemical Testing	Chlorfenapyr  (Assay Active / Concentration)  (Quantitative Analysis)	Nuchem/QCL/STM/08 CIPAC 570/TC/M- Hand Book Volume O
<b>Pesticides</b> (Lufenuron)	Chemical Testing	Lufenuron  (Assay Active / Concentration)  (Quantitative Analysis)	Nuchem /QCL/STM/10 CIPAC 704/EC/M- Hand Book Volume M
<b>Pesticides</b> (Fipronil)	Chemical Testing	Fipronil  (Assay Active / Concentration)  (Quantitative Analysis)	Nuchem/QCL/STM/ 7 CIPAC 581/SC/M- Hand Book Volume O

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<b>Pesticides</b> (Mesotrione)	Chemical Testing	Mesotrione  (Assay Active / Concentration)  (Quantitative Analysis)	Nuchem/QCL/STM/24 NLA-PT-T-P-23-02
<b>Pesticides</b> (Azoxystrobin)	Chemical Testing	Azoxystrobin  (Assay Active / Concentration)  (Quantitative Analysis)	Nuchem/QCL/STM/25 NLA-PT-T-P-06-08
<b>Pesticides &amp; Fertilizers</b>	Physical Testing	pH (Quantitative Analysis)	Nuchem/QCL/STM/01 CIPAC Volume –F 75/MT/-
<b>Pesticides</b> (Difenoconazole)	Chemical Testing	(Difenoconazole) (Assay Active / Concentration)  (Quantitative Analysis)	Nuchem/QCL/STM/26  NLA-PT-T-P-07-5
<b>Pesticides</b> (Lambda- Cyhalothrin)	Chemical Testing	(Lambda- Cyhalothrin) (Assay Active / Concentration)  (Quantitative Analysis)	Nuchem/QCL/STM/27  NLA-PT-T-P-07-6
<b>Pesticides</b> (Diflubenzuron)	Chemical Testing	(Diflubenzuron) (Assay Active / Concentration)  (Quantitative Analysis)	Nuchem/QCL/STM/28  NLA-PT-T-P-06-09
<b>Fertilizers</b> (Total Nitrogen)  (Amonical, Urical,Nitrical) Liquid /Solid		Quantitative determination of active ingredient Total Nitrogen  Quantitative determination of active ingredient Ammonical	NUCHEM/QCL/STM/1 8 Based on reference: Official Methods of Analysis of AOAC International, 21st Edition, 2019, Volume

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	Chemical Testing	Nitrogen	I, Current through Revision, 2019. Method No. 2.4.05 (AOAC Official Method 978.02), Fertilizers Chapter 2 Page 14-15 (Kjeldhal,s distillation apparatus)
		Quantitative determination of active ingredient Nitrate Nitrogen	
		Quantitative determination of active ingredient Uric Nitrogen	
<b>Fertilizers</b> (Phosphorus) (Total & Available) Liquid /Solid	Chemical Testing	(Phosphorus) (Quantitative determination of active ingredient Citrate soluble & Total Phosphorous (P2O5))	<b>NUCHEM/QCL/STM/17</b> Based on reference: Pakistan standard for Single Super Phosphate (2nd edition) PS: 67-1996. PSQCA. Karachi Titrimetric Method
<b>Fertilizers</b> (Potash) Liquid /Solid	Chemical Testing	(Potash) Quantitative determination of active ingredient Water Soluble	<b>NUCHEM/QCL/STM/16</b>  Based on reference: Richards. L.A. 1954 Diagnosis & Improvement of Saline & Alkali Soils. USDA, Agric, Hand Book 60, Washington, D.C. (Flame Photometry)
<b>Fertilizers</b> (Zinc) Total (Acid Soluble) & Water Soluble Liquid /Solid	Chemical Testing	(Zinc) Quantitative determination of active ingredient of Zinc ( Acid Soluble & Water Soluble)	<b>NUCHEM/QCL/STM/21</b> Based on reference: Official Methods of Analysis of AOAC International, 21st Edition, 2019, Volume I, Current Through Revision, 2019. Method No. 2.6.01 (AOAC Official Method 965.09), Fertilizers Chapter 2, Subchapter 6, Page 29-30 (Atomic Absorption Spectrophotometry)
<b>Fertilizers</b> (Copper) Total (Acid Soluble) & Water Soluble Liquid /Solid	Chemical Testing	(Copper) Quantitative determination of active ingredient Copper ( Acid Soluble & Water Soluble)	<b>NUCHEM/QCL/STM/21</b> Based on reference: Official Methods of Analysis of AOAC International, 21st Edition, 2019, Volume I, Current Through Revision, 2019. Method No. 2.6.01 (AOAC Official Method 965.09), Fertilizers Chapter 2, Subchapter 6, Page 29-30 (Atomic Absorption Spectrophotometry)

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<b>Fertilizers</b> (Manganese) Total (Acid Soluble) & Water Soluble Liquid /Solid	Chemical Testing	(Manganese) Quantitative determination of active ingredient of Manganese ( Acid Soluble & Water Soluble	<b>NUCHEM/QCL/STM/21</b> Based on reference: Official Methods of Analysis of AOAC International, 21st Edition, 2019, Volume I, Current Through Revision, 2019. Method No. 2.6.01 (AOAC Official Method 965.09), Fertilizers Chapter 2, Subchapter 6, Page 29-30 (Atomic Absorption Spectrophotometry)
<b>Fertilizers</b> (Iron) Total (Acid Soluble) & Water Soluble Liquid /Solid	Chemical Testing	Iron Quantitative determination of active ingredient of Iron (Acid Soluble & Water Soluble	<b>NUCHEM/QCL/STM/21</b> Based on reference: Official Methods of Analysis of AOAC International, 21st Edition, 2019, Volume I, Current Through Revision, 2019. Method No. 2.6.01 (AOAC Official Method 965.09), Fertilizers Chapter 2, Subchapter 6, Page 29-30 (Atomic Absorption Spectrophotometry)

<b>Pesticides</b>	Physical Testing	Density Of SC Product (Quantitative Analysis)	<b>Nuchem/QCL/STM/29</b> CIPAC # MT-4, VolF, page # 18
<b>Pesticides</b>	Physical Testing	Emulsion (EC Product) (Quantitative Analysis)	<b>Nuchem/QCL/STM/5</b> MT 36.1 five percent v/v oil Phase Method number: 36.1.1MT/ Hand Shaking Page:108-110 Cipac Volume: F
<b>Pesticides</b> (Tebuthiuron)	Chemical Testing	(Tebuthiuron) (Assay Active / Concentration)  (Quantitative Analysis)	<b>Nuchem/QCL/STM/30</b> NLA-PT-T-P-08-05

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<b>Pesticides</b> (Imidacloprid)	Chemical Testing	(Imidacloprid) (Assay Active / Concentration)  (Quantitative Analysis)	<b>Nuchem/QCL/STM/34</b> NLA-PT-T-P-06-10
<b>Pesticides</b> (Emamectin Benzoate)	Chemical Testing	(Emamectin Benzoate) (Assay Active / Concentration)  (Quantitative Analysis)	<b>Nuchem/QCL/STM/31</b> In-House Validated HPLC Method
<b>Pesticides</b> (Chlorantraniliprole)	Chemical Testing	(Chlorantraniliprole) (Assay Active / Concentration)  (Quantitative Analysis)	<b>Nuchem/QCL/STM/32</b> CIPAC Volume P MT 794 In-House Validated HPLC Method
<b>Pesticides</b> (Acetamiprid)	Chemical Testing	(Acetamiprid) (Assay Active / Concentration)  (Quantitative Analysis)	<b>Nuchem/QCL/STM/33</b> CIPAC Vol L [649] In-House Validated HPLC Method
<b>Fertilizers</b> (Humic Acid Liquid /Solid)	Chemical Testing	Humic Acid Quantitative determination of active ingredient of Humic Acid (Liquid /Solid)	<b>Nuchem/QCL/STM/19</b> R.S. Swift, Methods of Soil Analysis Part 3, American Society of Agronomy, Inc., Madison, Wisconsin, 1996
<b>Fertilizers</b> (Sulphur Liquid /Solid)	Chemical Testing	Sulphur Quantitative determination of active ingredient Sulphur Liquid /Solid	<b>Nuchem/QCL/STM/23</b> AOAC-Method 980.02, 17th edition, Determination of Sulphur in Fertilizer
<b>Fertilizers</b> (Boron Water Soluble Liquid /Solid)	Chemical Testing	Boron Quantitative determination of active ingredient Boron Water Soluble Liquid /Solid	<b>Nuchem/QCL/STM/20</b> Official Method of Analysis AOAC International 20 <sup>th</sup> edition 2016 Method No. 2.6.04 (AOAC Official Method 982.01) Fertilizer Chapter 2 to Chapter 6 Page 31-32

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<b>Pesticides</b> (S-Metolachlor)	Chemical Testing	(S-Metolachlor) (Assay Active / Concentration)  (Quantitative Analysis)	<b>Nuchem/QCL/STM/36</b> <b>GC Method</b> <b>NLA-PT-T-P-07-07</b>
<b>Fertilizers</b> (Chelated Zinc) (Liquid /Solid)	Chemical Testing	Chelated Zinc Quantitative determination of active ingredient Chelated Zinc Liquid /Solid	<b>Nuchem/QCL/STM/35</b> Official Methods of Analysis of AOAC International, 21 <sup>ST</sup> Edition, 2019, current through revision, 2019. Method No. 2.6.01 (AOAC Official Method 965.09), Fertilizers Chapter 2, Page 29-30
<b>Fertilizers</b> (Chloride) Liquid /Solid)	Chemical Testing	Chloride Quantitative determination of active ingredient Chloride Liquid /Solid	<b>Nuchem/QCL/STM/41</b> AOAC-2.6.09, 17 <sup>th</sup> edition, Method No. 928.02 Determination of chloride in Fertilizer Pakistan Standard Specification for Potassium Sulphate fertilizer grade, 2 <sup>nd</sup> Revision, PSQCA, Karachi, PS:1501-2011 (R) ICS: 65.
<b>Fertilizers</b> (Magnesium) Total (Acid Soluble) & Water Soluble Liquid /Solid	Chemical Testing	Magnesium Quantitative determination of active ingredient Magnesium Liquid /Solid	<b>Nuchem/QCL/STM/40</b> Official Methods of Analysis of AOAC International 21 <sup>ST</sup> Edition, 2019, Method No.2.6.01- C (e1). (AOAC Official Method 965.09), Fertilizers Chapter 2, Sub Chapter-6. Page 29-30

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