

	<b>ACCREDITATION DOCUMENT</b>	<b>F-06/02 Issue Date: 18/08/2020 Rev. No: 09 LAB 085</b>
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## **Accreditation No: LAB 085**

### **Awarded to**

**M/s Defence Science & Technology Organization (DESTO).  
Food Health & Safety Analysis Lab (FHSAL)  
34- 37 PNH Lines, Karachi Cantt, 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 **06-04-2015** 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 **14-03-2024**.

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**

**26-06-2023**

Date

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Director General

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### Testing Laboratory.

**Accreditation Scope of M/s Defence Science & Technology Organization (DESTO), Food Health & Safety Analysis Lab (FHSL), 34- 37 PNH Lines, Karachi Cantt, 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
Food and agri products (Grains, spices and nuts etc)	Food Testing	Aflatoxin B1, Aflatoxin B2, Aflatoxin G1, Aflatoxin G2 Total Aflatoxin	Inhouse SOP #: BRC/17025/WI-1.45 HPLC METHOD SIST EN 14123 / AOAC 991.31
Food / seed material	Food Testing	GMOs Testing (Qualitative Analysis by GMO event CP4- EPSPS (in soy)	Inhouse SOP #: BRC/MBD-17025/WI-2.3 ISO 21571:2005 (E) (Modified) for Nucleic acid extraction  Inhouse SOP #: BRC/MBD-17025/WI-2.5 ISO 21569:2005 (E) (Modified) for Qualitative PCR Analysis
Food / Plant material Food	Food Testing	GMOs Testing (Qualitative Analysis by GMO event Cry1A(b))	Inhouse SOP #: BRC/MBD-17025/WI-2.3 ISO 21571:2005 (E) (Modified) for Nucleic acid extraction  Inhouse SOP #: BRC/MBD-17025/WI-2.5 ISO 21569:2005 (E) (Modified) for Qualitative PCR Analysis
Food / Plant material Food	Food Testing	GMOs Testing (Qualitative Analysis by GMO event Bt11)	Inhouse SOP #: BRC/MBD-17025/WI-2.3 ISO 21571:2005 (E) (Modified) for Nucleic acid extraction  Inhouse SOP #: BRC/MBD-17025/WI-2.5 ISO 21569:2005 (E) (Modified) for

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			Qualitative PCR Analysis
Food / Plant material Food	Food Testing	GMOs Testing (Qualitative Analysis by GMO event MON810)	Inhouse SOP #: BRC/MBD-17025/WI-2.3 ISO 21571:2005 (E) (Modified) for Nucleic acid extraction  Inhouse SOP #: BRC/MBD-17025/WI-2.5 ISO 21569:2005 (E) (Modified) for Qualitative PCR Analysis
Food / Plant material Food	Food Testing	GMOs Testing (Qualitative Analysis p35S, tNOS)	Inhouse SOP #: BRC/MBD-17025/WI-2.3 ISO 21571:2005 (E) (Modified) for Nucleic acid extraction  Inhouse SOP #: BRC/MBD-17025/WI-2.5 ISO 21569:2005 (E) (Modified) for Qualitative PCR Analysis
Food (Grains, Spices, Nuts etc)	Food Testing	Total Aflatoxins	AOAC 19 <sup>th</sup> Edition 991.31 / Afla Test Instruction Manual Method # 4.6 page # 28-29 Method # 4.5 page # 26-27 Method # 4.7 page 30 Method # 4.21 page 49 Method # 4.23 page 52 Inhouse SOP #: BRC/17025/WI-1.34,1.35,1.36,1.37
Betel nut	Food Testing	Total Aflatoxins	Afla Test Instruction Manual Method # 4.18 page 46 In house validated method. Inhouse SOP #: BRC/17025/WI-1.44
Cereal, ginger	Food Testing	Total Aflatoxins	Inhouse SOP #: BRC/17025/WI-1.42 ELISA kit method
Wheat, corn Germ Meal, Corn Bran, Dried Distillers Grains & Rough Rice	Food Testing	Total Aflatoxins	Afla Test Instruction Manual Method # 4.35 page 68 Inhouse SOP #: BRC/17025/WI-1.43
Water (drinking & sea water)	Water Testing	pH	AOAC, 19 <sup>th</sup> Ed.(2012) ,973.41, (11.1.03), Pg # 2. pH meter Inhouse SOP #: BRC/17025/WI-1.27

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		Chloride	Titration method with Silver Nitrate Water & waste Analysis, S.N. Kaul Ashutosh Gauth, 2002 page 54. pH meter Inhouse SOP #: BRC/17025/WI-1.26
		Hardness	Titrametric method AOAC, 19 <sup>th</sup> Ed.(2012), 973.52, (11.1.21) Inhouse SOP #: BRC/17025/WI-1.25
		TDS	Drying oven Method AOAC, 19 <sup>th</sup> Ed.(2012), 920.193, (11.1.09) Modified and via Multimeter Inhouse SOP #: BRC/17025/WI-1.24, 1.31
		Conductivity	Multimeter / AOAC Official Method of Analysis, 19 <sup>th</sup> Edition (2012) 973.40, (11.01.2). Inhouse SOP #: BRC/17025/WI-1.24, 1.31
Cereal Based Products (Wheat Flour, Bran, Rice, Bread etc.)	Food Testing	Moisture	Oven Drying Method AOAC Official Method of Analysis, 19 <sup>th</sup> Edition (2012) 925.10, (32.1.03). Inhouse SOP #: BRC/17025/WI-1.1 <b>Modified</b> Hot Air Oven, Analytical Balance
		Fat	Soxhlet Apparatus Method AOAC Official Method of Analysis 19 <sup>th</sup> Edition (2012) 945.38 (32.2.01) (F 4.5.01) (920.39). <b>Modified</b> Inhouse SOP #: BRC/17025/WI-1.3 Soxhlet Apparatus Hot Air Oven, Water bath, Analytical Balance
		Ash	Muffle furnace method AOAC Official Method of Analysis, 19 <sup>th</sup> Edition (2012)) 923.03, (32.1.05) Inhouse SOP #: BRC/17025/WI-1.2 Muffle Furnace, Analytical Balance

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		Protein(By Nitrogen Estimation)	Macro Kjeldhal Method AOAC Official Method of Analysis, 19 <sup>th</sup> Edition (2012) 920.87 (32.1.22).  AOAC Official Method of Analysis, 19 <sup>th</sup> Edition (2012) 991.20 (33.2.11) <b>Modified</b> BRC/17025/WI-1.4 Kjeldhal Apparatus, Analytical Balance
		Total Carbohydrate in cereal food (by difference method)	Chapter 10 page # 151 Food Analysis 4 <sup>th</sup> Edition 2010, by S.SUZANNE NIELSEN Inhouse SOP #: BRC/17025/WI-1.5
		Total Energy value / Calorific Value	Chapt 1 page 9, "The Composition of Foods" MacCance & Widdowson's, 7 <sup>th</sup> Ed. Inhouse SOP #: BRC/17025/WI-1.6
Milk powder	Food Testing	Moisture	PSI Standards: 363-82 Inhouse SOP #: BRC/17025/WI-1.22
		Ash	Muffle furnace method AOAC Official Method of Analysis, 19 <sup>th</sup> Edition (2012)) 923.03, (32.1.05) Inhouse SOP #: BRC/17025/WI-1.23 Muffle Furnace, Analytical Balance

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