

Accreditation No: LAB 015

Awarded to

Product Laboratory Pakistan Tobacco Company Limited Akora Khattak, District Nowshera 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 **24-10-2005** by Pakistan National Accreditation Council.

The laboratory complies with the requirements of ISO/IEC 17025:2005.

The accreditation requires regular surveillance, and is valid until 15-06-2022.

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

08/07/2019 Date

Director General



Testing Laboratory.

Accreditation Scope of Product Laboratory, Pakistan Tobacco Company Limited, Akora Khattak, District Nowshera, Pakistan

Permanent laboratory premises X

| Materials/Prod ucts 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 |
|-------------------------------|--|--|---|
| Cigarette | Material / Component Testing | Total Particulate Matter and Puff No. | ISO 4387 Determination of total & nicotine free dry particulate matter using a routine analytical smoking machine ISO 3308 Routine Analytical cigarette smoking Machine Definitions and standard conditions BAT GAT-S 0001/04 Cigarette - Determination of total & nicotine free dry particulate matter using a routine analytical smoking machine BAT SMA C 5.8 Jul 1994 Determination of Total Particulate Matter Gravimetrically using Smoking Machine SM 400 |
| Smoke Extract | Material / Component Testing | Total Nicotine Alkaloids in Smoke | ISO 10315 Determination of Nicotine in smoke condensates - Gas- chromatographic method BAT SMA C.4.1 Aug 2001 Determination of Nicotine in smoke by Flame Ionisation Detection through Gas Chromatograph |

Director



ACCREDITATION DOCUMENT

F-06/02 Issue Date: 10/08/15 Rev. No: 07 LAB 015

| Smoke Extract | Material / Component Testing | Water in Smoke | ISO 10362-1 Determination of water in smoke condensates - Part 1: Gas- chromatographic method BAT SMA C.4.1 Aug 2001 Determination of Water in smoke by Thermal Conductivity Detection through Gas Chromatograph |
|-------------------|---------------------------------|---------------------------------------|---|
| Cigarette | Physical Testing | Cigarette Weight | BAT GAT P0017/01 Determination of weight - Cigarettes & Filters |
| Cigarette | Physical Testing | Circumference | ISO 2971 Cigarettes and filter rods - Determination of nominal diameter - Method using a laser beam measuring apparatus BAT GAT-P 0002/02 Cigarettes & Filter rods - determination of nominal diameter-method using a non contact optical measuring apparatus |
| Cigarette/Filters | Physical Testing | Pressure Drop | ISO 6565Tobacco and tobacco products - Draw resistance of cigarettes and pressure drop of filter rods - Standard conditions and measurementBAT GAT-P 0009/02 Cigarettes and filter rods - Determination of Draw Resistance and Pressure Drop |
| Cigarette | Physical Testing | Ventilation | ISO 9512 Determination of Ventilation BAT GAT – P0010/02 Cigarettes - Determination of ventilation |
| Cigarette | Physical Testing | Cigarette & Cig. Component lengths | BAT SMA A.2.1 Mar 2000 Measurement of Cigarette & Cigarette Components Length |
| Cigarette | Material Testing | Paper Permeability | ISO 2965 Determination of Air Permeability BAT GAT-P 0004/01 Determination of Air permeability |

Director



| Cigarette | Physical Testing | Ends Stability | ISO 3550-1 Determination of loss of tobacco from the ends - Part 1: Method using a rotating cylindrical cage) BAT GAT P0016/01 Determination of Loss of Tobacco from the ends using a cylindrical cage |
|---------------------|---------------------------------|--|--|
| Cigarette / Filters | Physical Testing | Cigarette / Filter Firmness | BAT GAT P006/01 Determination of the Firmness of Cigarettes BAT GAT P0026/01 Filter Rod Hardness |
| Tobacco | Chemical Testing | Total Nicotine Alkaloids (as Nicotine) in tobacco | ISO 15152 Determination of the content of total alkaloids as nicotine - Continuous-flow Analysis Method BAT GAT-C 0001/05 Determination of the content of total alkaloids as nicotine - Continuous-flow analysis method |
| Tobacco | Chemical Testing | Total Sugars | BAT GAT-C 0002/04 Determination of the content of total sugars in tobacco by - Continuous-flow analysis method |
| Tobacco | Chemical Testing | Chlorides in tobacco | BAT GAT-C 0004/01 Determination of chloride content in tobacco - Continuous-flow analysis method |
| Tobacco | Material / Component Testing | Oven Volatiles in tobacco | BAT GAT-P0001/05 Tobacco Moisture Content (oven volatiles):BAT Oven for 3hr @110 degree C |