

**TEST REPORT**  
**IE-2025-0202**

**1. CUSTOMER DATA**

1.1 Client : GRUPO AYNIPERU E.I.R.L.  
1.2 Tax ID or National ID : 20612174319  
1.3 Address : AV MACAMANGO S/N

**2. SAMPLE DATA**

2.1 Product : FOOD  
2.2 Sampled by : CUSTOMER (c)  
2.3 Number of Samples : 01  
2.4 Date of Receipt : April 7, 2025  
2.5 Trial Period : March 28, 2025 to April 4, 2025  
2.6 Date of Issue : April 5, 2025  
2.7 Date and Time of Sampling : Not specified  
2.8 Quote No. : COT-102204-SL25

**3. TEST REQUESTED - METHODOLOGY USED**

| TEST   | METHOD   |
|--|--|
| Determination of Cadmium (Cd)                            | Atomic absorption spectrometry   |
| Determination of Lead (Pb)                               | Atomic absorption spectrometry   |
| Determination of Mercury (Hg)                            | Atomic absorption spectrometry   |
| Determination of Arsenic (As)                            | Atomic absorption spectrometry   |
| Determination of Flavonoids                              | UV-Visible Spectrophotometry   |
| Determination of Ochratoxin A                            | UNE-EN 17641:2023 Multiple method for the determination of aflatoxins, deoxynivalenol, fumonisins, ochratoxin A, T-2 toxin, HT-2 toxin, and zearalenone by LC-MS/MS  |
| Determination of Polycyclic Aromatic Hydrocarbons (PAHs) | EPA METHOD 8270 E Rev. 06. Semivolatile Organic Compounds By Gas Chromatography/ Mass Spectrometry (GC/MS)   |
| Pesticide Residues LC-MS / GC-MS                         | UNE-EN 15662:2019 Plant-based foods. Multiple method for the determination of pesticide residues by GC and LC analysis after extraction with acetonitrile and cleanup by dispersion SPE. QuEChERS method - pesticide screening |
| Determination of theobromine                             | HPLC (High Performance Liquid Chromatography)  |
| Caffeine determination                                   | AOAC Official Method 962.13 21st Edition 2019. Caffeine in nonalcoholic beverages  |

**4. RESULTS**

**4.1. SAMPLE DESCRIPTION:** Cocoa powder: Determination of cadmium, arsenic, mercury, lead, flavonoids, Ochratoxin A, Polycyclic Aromatic Hydrocarbons (PAHs), Pesticide Residues, Caffeine, and Theobromine

**TEST REPORT IE-2025-0200**
**4.2. RESULTS**
**Table No. 1: RESULTS OBTAINED**

| Laboratory code | Parameter  | Unit  | Results   |
|-----------------|--|-------|-----------|
| S-0226          | Determination of Cadmium (Cd)                            | mg/kg | < 0.002   |
| S-0226          | Determination of Lead (Pb)                               | mg/kg | < 0.01    |
| S-0226          | Determination of Mercury (Hg)                            | mg/kg | < 0.002   |
| S-0226          | Arsenic (Hg) determination                               | mg/kg | < 0.001   |
| S-0226          | Determination of Total Flavonoids:                       | mg/g  | 9.5       |
|                 | Epicatechin  | mg/g  | 4.5       |
|                 | Catechin   | mg/g  | 1.4       |
|                 | Total proanthocyanidins                                  | mg/g  | 3.6       |
| S-0226          | Determination of Ochratoxin A                            | µg/kg | < 0.3     |
| S-0226          | Determination of Polycyclic Aromatic Hydrocarbons (PAHs) | µg/kg | < 0.05    |
| S-0226          | Pesticide Residues LC-MS / GC-MS                         | -     | Compliant |
| S-0226          | Theobromine Determination                                | mg/g  | 14.1      |
| S-0226          | Caffeine determination                                   | mg/g  | 3.2       |

**Key**

<sup>(c)</sup> Information provided by the customer.

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- The results relate only to the items tested.
- This laboratory is accredited in accordance with the recognized international standard ISO/IEC 17025. This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system.

**END OF DOCUMENT**