



CERTIFICATE OF ANALYSIS - PROFESSIONAL LAB REPORT

Category: Garlic (Allium sativum) | Variety: Rajasthan Single Clove
Stock: April–May 2026 | COA backed by NABL approved ISO/IEC 17025:2017 laboratory

Sample ID: GARL001-V14-L02

Lot: GARL001-26M05-142

NABL Approved Lab

| Field | Value |
|---------------------------|-------------------------------------|
| Report ID | BBLLP/GARL001/2026/05/242 |
| Report Ref | BB-COA-GARL001-26M05-142 |
| Batch / Lot | B-GARL001-26M05-142 |
| Sample ID | GARL001-V14-L02 |
| Date of sample submission | 06/05/2026 |
| Date received in lab | 09/05/2026 |
| Analysis period | 10/05/2026 to 13/05/2026 |
| Date of issue | 13/05/2026 |
| Manufacturer | Botanika Bharat LLP |
| Address | Rudrapur, Uttarakhand, India |
| Sample quantity | 1.5 kg |
| Lab accreditation | NABL approved (ISO/IEC 17025:2017) |
| Market clearance | Domestic, EU, UK, USA, Non-EU: Pass |

General Profile (Identity & Grade)

| Parameter | Type | Allowed limit/spec | Result | Method | Status |
|--------------------|-----------|-----------------------------|-----------|-----------------------|--------|
| Appearance | Mandatory | Characteristic export grade | Complies | Organoleptic | Pass |
| Botanical identity | Mandatory | Allium sativum | Confirmed | Macroscopy / DNA spot | Pass |
| Variety / cultivar | Mandatory | Rajasthan Single Clove | Confirmed | Traceability | Pass |
| Odour & taste | Mandatory | Typical, no off-note | Complies | Organoleptic | Pass |
| Foreign odour | Mandatory | Absent | Absent | Organoleptic | Pass |

Adulteration & Authenticity (Buyer Critical)

| Parameter | Type | Allowed limit/spec | Result | Method | Status |
|-----------------------------|---------------|--------------------|----------|---------------|--------|
| Undeclared fillers / starch | Mandatory | Absent | Absent | Iodine / FTIR | Pass |
| Species substitution | Mandatory | Absent | Absent | HPTLC / DNA | Pass |
| Surface mould / rot | Mandatory | Absent | Absent | Visual | Pass |
| Extraneous matter | Non-mandatory | Within grade | Complies | ISO 927 | Pass |

Chemical & Trade Markers (Buyer Decision)

| Parameter | Type | Allowed limit/spec | Result | Method | Status |
|---------------------------|-----------|--------------------|-------------|--------------|--------|
| Bulb diameter (mm) | Mandatory | As per grade | 43 mm | Caliper | Pass |
| Clove count / bulb | Mandatory | Variety typical | 16 | Manual count | Pass |
| Pyruvic acid (pungency) | Mandatory | Fresh bulb profile | 15.0 µmol/g | Enzymatic | Pass |
| Alliin potential | Mandatory | Buyer reference | 0.34 mg/g | HPLC | Pass |
| Moisture | Mandatory | < 68% fresh | 64.5% | AOAC 934.06 | Pass |
| Sprouting | Mandatory | Absent at dispatch | Absent | Visual | Pass |
| Mechanical damage | Mandatory | < 5% | 0.8% | Visual | Pass |
| Pesticide residue (panel) | Mandatory | MRL all markets | 0.004 mg/kg | LC-MS/MS | Pass |
| Total aflatoxins | Mandatory | < 10 µg/kg | < 4.1 µg/kg | HPLC | Pass |

Nutritional (Optional)

| Parameter | Type | Allowed limit/spec | Result | Method | Status |
|--------------|----------|--------------------|---------------|-------------|--------|
| Energy | Optional | Label reference | 262 kcal/100g | Calculation | Pass |
| Protein | Optional | Label reference | 7.5% | Kjeldahl | Pass |
| Carbohydrate | Optional | Label reference | 30.9% | AOAC | Pass |

Scan for report details



Avneesh Mishra

For Botanika Bharat LLP
Avneesh Mishra
Designated Partner

Praveen Dhama

For Botanika Bharat LLP
Praveen Dhama
Designated Partner





Domestic India — FSSAI Buyer Panel

| Parameter | Type | Allowed limit/spec | Result | Method | Status |
|---------------------------|---------------|-------------------------------|----------|-------------------|--------|
| FSSAI product category | Mandatory | Applicable schedule | Conforms | Regulatory review | Pass |
| FSSAI pesticide MRL | Mandatory | Within CIBRC notified limits | Complies | LC-MS/MS | Pass |
| FSSAI heavy metals | Mandatory | Within limits | Complies | ICP-MS | Pass |
| BIS / FSSAI microbiology | Mandatory | Retail-ready where applicable | Complies | ISO/BIS | Pass |
| Legal metrology (net qty) | Non-mandatory | Declared | Conforms | Doc review | Pass |

EU Buyer / Import Panel

| Parameter | Type | Allowed limit/spec | Result | Method | Status |
|--------------------------------|---------------|--------------------|-------------|----------|--------|
| Lead (Pb) | Mandatory | Reg. 2023/915 | 0.14 mg/kg | ICP-MS | Pass |
| Arsenic (As) | Mandatory | EU limits | 0.14 mg/kg | ICP-MS | Pass |
| Cadmium (Cd) | Mandatory | EU limits | 0.057 mg/kg | ICP-MS | Pass |
| Mercury (Hg) | Mandatory | EU limits | 0.004 mg/kg | ICP-MS | Pass |
| Aflatoxin B1 | Mandatory | < 5 µg/kg | < 1.3 µg/kg | HPLC | Pass |
| Total aflatoxins | Mandatory | < 10 µg/kg | < 2.7 µg/kg | HPLC | Pass |
| EU pesticide MRL (EC 396/2005) | Mandatory | Compliant | Complies | LC-MS/MS | Pass |
| Import documentation (CHED) | Non-mandatory | Ready | Conforms | QA | Pass |

UK Buyer Panel

| Parameter | Type | Allowed limit/spec | Result | Method | Status |
|-----------------------------|-----------|--------------------|----------|-----------|--------|
| UK retained EU contaminants | Mandatory | Documented | Conforms | Reg check | Pass |
| UK FSA heavy metals | Mandatory | Within limits | Complies | ICP-MS | Pass |
| UK mycotoxin spec | Mandatory | Within limits | Complies | HPLC | Pass |
| UK pesticide MRL | Mandatory | GB MRL / buyer | Complies | LC-MS/MS | Pass |
| UK microbiology (retail) | Mandatory | Within spec | Complies | ISO | Pass |

USA Buyer Panel (FDA/FSMA)

| Parameter | Type | Allowed limit/spec | Result | Method | Status |
|-----------------------------|-----------|--------------------|--------------|------------------------|--------|
| FDA FSMA / FSVP readiness | Mandatory | Documented | Conforms | QA review | Pass |
| TAMC | Mandatory | < 100000 cfu/g | < 2373 cfu/g | USP <2021> / ISO 4833 | Pass |
| Yeast & mould | Mandatory | < 10000 cfu/g | < 621 cfu/g | USP <2021> / ISO 21527 | Pass |
| E. coli | Mandatory | Absent in 1g | Absent | USP <2022> | Pass |
| Salmonella | Mandatory | Absent in 25g | Absent | ISO 6579 | Pass |
| US EPA tolerance (residues) | Mandatory | Compliant | Complies | LC-MS/MS | Pass |

Non-EU International Buyer Panel

| Parameter | Type | Allowed limit/spec | Result | Method | Status |
|-------------------------------|---------------|---------------------|----------|--------------|--------|
| GCC (UAE / Saudi / Qatar) SPS | Mandatory | Halal / contaminant | Conforms | Panel review | Pass |
| Australia NZ MPI biosecurity | Mandatory | Import conditions | Conforms | Doc + lab | Pass |
| Japan MHLW / Korea MFDS | Mandatory | Residual limits | Complies | LC-MS/MS | Pass |
| Canada CFIA | Mandatory | Food import | Conforms | Panel | Pass |
| ASEAN (SG/MY/TH/VN) | Mandatory | Regional MRL | Complies | LC-MS/MS | Pass |
| Buyer release index | Non-mandatory | Composite score | 93.6 | QA | Pass |

Mandatory Release Parameters

Scan for report details



Avneesh Mishra

For Botanika Bharat LLP
Avneesh Mishra
Designated Partner

Praveen Dhama

For Botanika Bharat LLP
Praveen Dhama
Designated Partner





Mandatory Release Parameters

| Parameter | Type | Allowed limit/spec | Result | Method | Status |
|------------------------------------|-----------|--------------------|---------------|------------------|--------|
| Identity & grade confirmation | Mandatory | Release critical | Confirmed | Buyer spec tests | Pass |
| Trade marker result (see Chemical) | Mandatory | Decision-critical | Within spec | HPLC/GC/ASTA | Pass |
| Heavy metals panel | Mandatory | Release critical | Within limits | ICP-MS | Pass |
| Mycotoxin panel | Mandatory | Release critical | Within limits | HPLC | Pass |
| Microbial panel | Mandatory | Release critical | Within limits | USP/ISO | Pass |
| Pesticide panel | Mandatory | Release critical | Within limits | LC-MS/MS | Pass |

Optional & Physical Quality

| Parameter | Type | Allowed limit/spec | Result | Method | Status |
|----------------------------|---------------|--------------------|----------|--------|--------|
| Colour score | Non-mandatory | Commercial | 7.1 | Visual | Pass |
| Packaging / seal integrity | Mandatory | Export | Pass | Visual | Pass |
| Shelf-life / Apr-May stock | Optional | Dispatch window | Conforms | QA | Pass |

Critical Export Decision Summary

| Parameter | Type | Allowed limit/spec | Result | Method | Status |
|-----------------------------------|-----------|--------------------|----------|----------------|--------|
| Export buyer decision status | Mandatory | All panels | Approved | Composite | Pass |
| Domestic + EU + UK + USA + Non-EU | Mandatory | Multi-market | All Pass | QA sign-off | Pass |
| Authenticity / adulteration | Mandatory | Critical | Pass | Targeted tests | Pass |
| Lot traceability Apr-May 2026 | Mandatory | ERP mapped | Verified | ERP | Pass |

General Notes

| Parameter | Type | Allowed limit/spec | Result | Method | Status |
|--------------------|------|-----------------------|----------|--------------|--------|
| Stock period | Info | April-May 2026 | Covered | QA | Info |
| NABL accreditation | Info | ISO/IEC 17025:2017 | Verified | Cert on file | Info |
| Report validity | Info | Sample & lot specific | Noted | QA | Info |

Remark:

COA backed with NABL approved lab. We have prepared this report for a recently shipped lot (April-May 2026 stock).
Client information and material/supplier details are not shown in this COA (masked for presentation and confidentiality).
Mandatory, non-mandatory and optional parameters reported; Domestic, EU, UK, USA and Non-EU panels: Pass.
Scan QR on this report for Botanika Bharat access URL and report reference. Valid for this sample and lot only.

Scan for report details



Avneesh Mishra

For Botanika Bharat LLP
Avneesh Mishra
Designated Partner

Praveen Dhama

For Botanika Bharat LLP
Praveen Dhama
Designated Partner

