

# CERTIFICATE OF ANALYSIS

Document No.: COA-107993-2026    Rev.: 01

## SECTION 1 · PRODUCT SPECIFICATION

|              |                                 |
|--------------|---------------------------------|
| Product Name | Vilgain Creatine Orange & Mango |
| PV Number    | PV45659                         |
| Category     | Sport Nutritions; Creatine      |
| Batch No.    | 107993                          |
| Expiry Date  | 29.07.2028                      |

## SECTION 2 · LABORATORY TEST RESULTS

### 2.1 Microbiological Parameters

| Parameter             | Method     | LOR | Unit  | Result        |
|-----------------------|------------|-----|-------|---------------|
| Coliform Bacteria     | B-COLIF1   | 10  | CFU/g | <10           |
| Escherichia coli      | B-EC1      | 10  | CFU/g | <10           |
| Moulds                | B-YEMOU1   | 10  | CFU/g | <10           |
| Salmonella spp.       | B-SALMELI1 | —   | —     | negative/25 g |
| Staphylococcus aureus | B-STAPH1   | 10  | CFU/g | <10           |
| Total Viable Count    | B-TVC1     | 10  | CFU/g | <10           |
| Yeast                 | B-YEMOU1   | 10  | CFU/g | <10           |

Laboratory: ALS Czech Republic, s.r.o., Na Harfe 336/9, Prague 9

### 2.2 Heavy Metals

| Parameter | Method     | LOR    | Unit  | Result  |
|-----------|------------|--------|-------|---------|
| Arsenic   | B-METAXDG2 | 2.0    | mg/kg | <2.0    |
| Cadmium   | B-METAXDG2 | 0.10   | mg/kg | <0.10   |
| Lead      | B-METAXDG2 | 1.0    | mg/kg | <1.0    |
| Mercury   | B-HG-AMAT  | 0.0030 | mg/kg | <0.0030 |

Laboratory: ALS Czech Republic, s.r.o., Na Harfe 336/9, Prague 9

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## 2.3 Chemical Composition

| Parameter                        | Result       | Expanded Uncertainty |
|----------------------------------|--------------|----------------------|
| Creatine                         | 90.6 wt%     | +/- 1.6 wt%          |
| Creatinine                       | 0.035 wt%    | +/- 0.003 wt%        |
| Dicyandiamide                    | not detected | —                    |
| Dihydrotriazine (1,3,5-triazine) | not detected | —                    |

Laboratory: University of Chemistry and Technology Prague, Metrological and Testing Laboratory UCT Prague, Technická 1905/5, 166 28 Prague 6

## SECTION 3 · ANALYTICAL METHOD SUMMARIES

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| Method     | Description                                                                                                                                                                      |
|------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| B-COLIF1   | ČSN ISO 4832. Enumeration of coliform bacteria by cultivation.                                                                                                                   |
| B-EC1      | ČSN ISO 16649-2. Enumeration of beta-glucuronidase-positive Escherichia coli by cultivation.                                                                                     |
| B-HG-AMAT  | CZ_SOP_D06_09_024 (ČSN 75 7440). Determination of Hg by atomic absorption spectrometry.                                                                                          |
| B-METAXDG2 | CZ_SOP_D06_09_001 (US EPA Method 200.7, ČSN EN ISO 11885). Determination of elements by ICP-AES; sample homogenized and mineralized by acids and H <sub>2</sub> O <sub>2</sub> . |
| B-SALMELI1 | CZ_SOP_D06_09_309. Detection of Salmonella by ELISA (Solus). Enrichment and confirmation per ČSN EN ISO 6579-1.                                                                  |
| B-STAPH1   | ČSN EN ISO 6888-1. Enumeration of coagulase-positive staphylococci by cultivation.                                                                                               |
| B-TVC1     | ČSN EN ISO 4833-1. Enumeration of microorganisms by cultivation.                                                                                                                 |
| B-YEMOU1   | ČSN ISO 21527-1; ČSN ISO 21527-2. Enumeration of yeasts and moulds by cultivation.                                                                                               |

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| Method               | Description                                                                                                                                                                                                                      |
|----------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| UHPLC-DAD-HRMS/MS    | Determination of creatine content by UHPLC with UV detection (DAD, 214 nm) and high-resolution mass spectrometry; reverse phase chromatography. Test Certificate ML 2120/26, Appendix No. 1.                                     |
| KM15 (UHPLC-HRMS/MS) | Targeted screening and quantification of impurities (creatinine, dicyandiamide, dihydrotriazine) by UHPLC-HRMS/MS; accredited per ISO 17025; LOQ for dicyandiamide: 0.01 wt%. Test Certificate ML 2120/26, print no. ENG_881/26. |

QA Department · Vilgain s.r.o.

Place & Date: Brno, 10 September 2026

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