SILK FOODS CEYLON

TECHNICAL PRODUCT SPECIFICATION

Company Information

Manufacturer	Silk Foods Ceylon (Pvt) Ltd
Exporter	E-Silk Route Ventures (Pvt) Ltd
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Document Information

Document No.	SFC/SPEC/BPEP-CR/2026/01
Product Name	Black Pepper Crushed
Version	2026 V1.1
Date of Issue	31 March 2026
Revision	2026 V1.1
Revision Date	31 March 2026
Operation	Value-added processing — crushing and packing of dried black pepper

1. Product Description

Black Pepper Crushed consists of whole, sound, sun-dried *Piper nigrum L.* of Sri Lankan origin, sourced through E-Silk Route Ventures' direct-trade smallholder network and hand-graded under traditional craft techniques. Material is cleaned, graded by size and grade designation, and packed in food-grade bales or laminated bags in a FSSC 22000 / HACCP-certified facility. No fumigants, preservatives or artificial treatments are used. Cinnamon and similar bark spices are graded by quill diameter; cardamom/clove/pepper by grade designation.

2. Intended Use

Black Pepper Crushed (*Piper nigrum L.*) is intended for use as a culinary spice in beverage infusions, curries, marinades, pickles, mulled drinks, bakery applications, and as a raw material for further processing (grinding, oil extraction). Suitable for general adult and child populations (above 3 years of age). Vegan, vegetarian, gluten-free, dairy-free, halal-compatible.

3. Ingredient Declaration

100 % Black Pepper Crushed (*Piper nigrum L.*)

4. Allergen Declaration

Free from all 14 major allergens declared under EU Regulation 1169/2011. Naturally gluten-free, dairy-free, nut-free.

Packed in a facility that also handles tree nuts, sesame and mustard — cross-contact possible.

5. Nutritional Information (Per 100 g)

Nutrient	Amount per 100 g
energy (kcal)	251
energy (kJ)	1050
carbohydrate (g)	63.95
of which total sugars (g)	0.64
dietary fibre (g)	25.3
protein (g)	10.39
total fat (g)	3.26
of which saturated fa (g)	1.39
trans fatty acids (g)	0
sodium (mg)	20
calcium (mg)	443
iron (mg)	9.71
potassium (mg)	1329

6. Physical Specifications (Sensory / Organoleptic)

Parameter	Specification
Appearance	Whole, sound, characteristic form, free from foreign matter and infestation
Colour	Black to dark-brown crushed / cracked pieces, irregular 1–2 mm
Aroma	Sharp, warm, woody and pungent — characteristic of black pepper, free from off-odours
Taste	Hot, biting and pungent with aromatic warmth
Form / Grade	Crushed / cracked, irregular 1–2 mm pieces

7. Chemical Specifications

Parameter	Specification	Method
Moisture (%)	≤ 12.0 %	ISO 939:2021
Total Ash (%)	≤ 7.0 %	ISO 928:1997
Acid Insoluble Ash (%)	≤ 2.0 %	ISO 930:1997
Volatile Oil (mL/100 g)	≥ 1.0 (product-specific)	ISO 6571:2008
Foreign / Extraneous Matter (%)	≤ 2.0 %	ISO 927:2009
Pesticide Residues	Compliant with EU 396/2005	Multi-residue GC-MS/MS + LC-MS/MS (QuEChERS, EN 15662)
Piperine Content (%)	≥ 4.0 % (typical Ceylon-origin 5–7 %)	HPLC per ASTA 21.0

8. Microbiological Criteria

Parameter	Limit	Method
Aerobic Plate Count	≤ 1×10^7 CFU/g (Codex CXS 226 / industry)	ISO 4833-1:2013 (Amd 1:2022)
Yeast & Mould	≤ 1×10^5 CFU/g (Codex / industry)	ISO 21527-2:2008
Escherichia coli	≤ 1×10^2 CFU/g (Codex / EU 2073/2005)	ISO 7251:2005 (Amd 1:2023)
Salmonella spp.	Absent / 25 g (EU 2073/2005)	ISO 6579-1:2017 / Amd 1:2020
Total Coliforms	≤ 1×10^3 CFU/g (EU 2073/2005 (process hygiene))	ISO 4832:2006
Staphylococcus aureus	≤ 1×10^2 CFU/g (EU 2073/2005 (process hygiene))	ISO 6888-1:2021 (Amd 1:2023)
Listeria monocytogenes	Absent / 25 g (EU 2073/2005 (food safety))	ISO 11290-1:2017
Bacillus cereus	≤ 1×10^4 CFU/g (EU 2073/2005 (process hygiene))	ISO 7932:2004 (Amd 1:2020)

9. Heavy Metal Limits

Parameter	Limit	Method
Lead (Pb)	≤ 0.2 mg/kg (EU 2023/915 (spices, dried, whole))	ICP-MS per AOAC 999.10 / EPA 6020B
Cadmium (Cd)	≤ 0.5 mg/kg (EU 2023/915 (spices))	ICP-MS per AOAC 999.10 / EPA 6020B
Arsenic (As)	≤ 0.1 mg/kg (Codex CXS 193-1995)	ICP-MS per AOAC 999.10 / EPA 6020B
Mercury (Hg)	≤ 0.05 mg/kg (Codex CXS 193-1995)	CV-AAS per AOAC 977.15 / EPA 7473

10. Mycotoxin Limits

Parameter	Limit	Method
Aflatoxin B1	≤ 5 µg/kg (EU 1881/2006)	HPLC-FLD per AOAC 991.31
Aflatoxin Total	≤ 10 µg/kg (EU 1881/2006)	HPLC-FLD per AOAC 991.31
Ochratoxin A	≤ 15 µg/kg (EU 1881/2006 (spices))	HPLC-FLD per AOAC 2000.03

11. Pesticide Residues

Parameter	Limit	Method
Total Pesticide Residue (multi-residue scan)	Within EU Regulation (EC) 396/2005 MRL limits	Multi-residue GC-MS/MS + LC-MS/MS (QuEChERS, EN 15662)

12. Shelf Life & Storage

Shelf Life: 24 months from date of packing under recommended storage conditions.

After Opening: Use within 12 months of opening for best aroma and oil retention.

Storage Conditions:

- Store in a cool, dry place at ambient temperature (15–25 °C), relative humidity below 65 %.
- Protect from direct sunlight, heat sources, moisture, strong odours and pests.
- Handle using clean, dry, and appropriate utensils to prevent contamination.
- Once opened, reseal tightly and consume within a reasonable period.

13. Packaging

Primary Packaging: Bales / PP bags / kraft paper / aluminium-foil bags / cartons.

Bulk / Secondary Packaging: 1 kg / 2.5 kg / 5 kg / 10 kg / 15 kg / 20 kg / 25 kg bulk bags. Corrugated outer cartons.

Coding: Batch number, MFD and grade printed at packing.

14. Compliance & Standards

Products comply with Sri Lanka Food Act No. 26 of 1980 + Regulations 2026, EU Regulation (EC) 1881/2006 (heavy metal contaminants), EU Regulation (EC) 2073/2005 (microbiological criteria), EU Regulation (EC) 396/2005 (pesticide MRLs), EU Regulation 1169/2011 (Food Information to Consumers), and applicable Codex Alimentarius standards. Products are manufactured under BRCGS, FSSC 22000, HACCP, ISO 22000 and GMP-certified facilities.

Authorization

Report Prepared By	Manager Quality Assurance / R&D
Report Approved By	Factory Manager
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