SIDHI MARWADI PRIVATE LIMITED

Dedicated to Nature and Culture

IN-HOUSE QUALITY CONTROL & ANALYTICAL TEST REPORT

CERTIFICATE OF INTERNAL LABORATORY ANALYSIS (COA) • FSSAI & BIS COMPLIANCE

Executive Quality Statement: At Sidhi Marwadi Private Limited, purity, transparency, and traditional authenticity are the cornerstones of our spice processing heritage. Every batch of our Red Chilli (Lal Mirch) Powder is hygienically cold-ground from hand-selected, sun-ripened Marwadi red chillies (with stalks removed) and rigorously audited by our In-House Quality Assurance & Analytical Division prior to packaging. This report documents the comprehensive physical, proximate, oleoresin potency, chemical adulteration, contaminant, and microbiological evaluation conducted in accordance with the Food Safety and Standards (Food Products Standards and Food Additives) Regulations, 2011 (Regulation 2.9.3 – Chillies and Capsicum / Lal Mirchi Powder) and BIS (IS 2445) / ISO analytical protocols.

1. SAMPLE & BATCH IDENTIFICATION METADATA | Traceability & Regulatory Particulars

Product Name	Sidhi Marwadi Pure & Traditional Red Chilli (Lal Mirch) Powder	**Report Reference No.**	SMPL/QC/COA/2026/1109
Botanical / Commodity Name	Capsicum annuum L. (Stemless Sun-Dried Red Chilli Pods Ground)	**Date of Sampling & Analysis**	15 November 2026
Batch / Lot Number	26/L1000/K11	**Manufacturing / Packing Date**	November 2026 (Shelf Life: 9 Months)
Testing Facility	In-House Quality Control & Analytical Lab, Sidhi Marwadi Pvt. Ltd., Jodhpur	**FSSAI License Number**	12224999000329
Sample Condition & Packaging	Intact, Sealed Food-Grade Retail Pack (1KG Control Sample)	**Overall Batch Verdict**	**COMPLIANT / PASSED (100% PURE)**

2. ORGANOLEPTIC & PHYSICAL AUTHENTICITY PROFILE | Macroscopic & Sensory Evaluation

Appearance & Colour	Vibrant, natural deep crimson-red hue derived purely from endogenous carotenoid pigments (Capsanthin & Capsorubin); zero artificial sheen.
Aroma & Pungency	Characteristic rich, fruity-warm aroma with authentic, balanced capsaicinoid heat; completely free from rancid, smoky, or musty notes.
Texture & Consistency	Uniform, free-flowing ground spice retaining natural seed-to-pericarp oil balance; zero caking, grittiness, brick-dust sediment, or stalk fibres.

SIDHI MARWADI PRIVATE LIMITED CIN:U10795RJ2025PTC102887

REGISTERED OFFICE :
C/O SIDHI MARWADI, KHASRA NO. 1242/655 KUDI DHORU, KUDI, PIPAR ROAD, JODHPUR, RAJASTHAN, INDIA, 342606
CIN: U10795RJ2025PTC102887 | GSTIN: 08ABQCS2572P1ZE | FSSAI LIC. NO.: 12224999000329
8947914000, 9799956480 BUSINESS@SIDHIMARWADI.COM WWW.SIDHIMARWADI.COM

SCAN QR

3. COMPREHENSIVE ANALYTICAL & SAFETY TEST RESULTS | Audited 14-Point Laboratory Evaluation

S.No.	Test Parameters	Unit	Observed Test Result	Regulatory Requirement / Specification Limit (FSSAI / BIS)	Validated Method / Source Protocol	Status
1	**Moisture Content**	% by mass	**6.0%**	≤ 11.0% (Max)	FSSAI 10.005:2021 / Oven Gravimetric Method	**Superior**
2	**Total Ash (Dry Basis)**	% by mass	**4.0%**	≤ 8.0% (Max)	FSSAI 10.006:2021 / Gravimetric Method	**Superior**
3	**Acid-Insoluble Ash (Dry Basis)**	% by mass	**≤ 0.2%**	≤ 1.3% (Max)	FSSAI 10.007:2021 / Dilute HCl Gravimetric	**Superior**
4	**Crude Fibre (Dry Basis)**	% by mass	**≈ 15.0%**	≤ 30.0% (Max)	FSSAI Manual Validated Gravimetric Method	**Superior**
5	**Non-Volatile Ether Extract / NVEE (Dry Basis)**	% by mass	**≥ 12.0%**	≥ 12.0% (Min)	Soxhlet Extraction / FSSAI Validated Method	**Complies**
6	**Added Synthetic Colour & Sudan Dyes (I–IV)**	Qualitative / mg/kg	**Added Colour: Negative; Sudan Dyes: BLQ**	No extraneous colouring matter; Sudan Dyes I–IV Negative (BLQ)	HPLC-DAD / LC-MS/MS Enhanced Dye Screen	**Complies**
7	**Pesticide Residues (Multi-Residue Crop Panel)**	mg/kg	**BLQ (Not Detected)**	≤ Applicable FSSAI Commodity MRLs (LOQ ≤ 0.01 mg/kg)	LC-MS/MS + GC-MS/MS Multi-Residue Screen	**Complies**

SIDHI MARWADI PRIVATE LIMITED CIN U10795RJ2025PTC102887

SIDHI MARWADI PRIVATE LIMITED

Dedicated to Nature and Culture

S.No.	Test Parameters	Unit	Observed Test Result	Regulatory Requirement / Specification Limit (FSSAI / BIS)	Validated Method / Source Protocol	Status
8	**Heavy Metals (Pb, Cd, As, Hg)**	mg/kg	**Pb, Cd, As, Hg: BLQ**	Within FSSAI Contaminant Limits (Pb ≤10, Cd ≤1.5, As ≤1.1, Hg ≤1.0)	ICP-MS / ICP-OES Validated Method	**Complies**
9	**Aflatoxins / Mycotoxins (B1 & Total)**	µg/kg	**BLQ (Not Detected)**	Total Aflatoxins ≤ 30 µg/kg; Aflatoxin B1 ≤ 15 µg/kg (FSSAI)	HPLC-FLD / LC-MS/MS	**Complies**
10	**Ethylene Oxide (EtO) & 2-Chloroethanol (2-CE)**	mg/kg	**BLQ (Not Detected)**	Not Detected at Low LOQ (≤ 0.01 mg/kg; FSSAI & Export Spec)	GC-MS/MS	**Complies**
11	**Salmonella spp.**	Presence / 25 g	**Absent in 25 g**	Absent in 25 g (Zero Tolerance Safety Criterion)	ISO 6579-1 / FSSAI Microbiology Manual	**Complies**
12	**Total Plate Count (TPC), Yeast & Mould, E. coli**	CFU/g or Presence	**Low TPC & Yeast/Mould counts; E. coli: Absent**	TPC ≤ 10^5 CFU/g; Yeast & Mould ≤ 10^4 CFU/g; E. coli: Absent in 1 g	IS 5402, IS 5403, ISO 16649 / FSSAI Manual	**Complies**
13	**Adulterant, Artificial Dye & Filler Screen**	Qualitative / %	**Negative (0.0%)**	No added foreign starch, flour, sawdust, brick powder, synthetic colour, or mineral matter	Microscopy + Iodine Screen; Confirmatory HPLC/LC-MS for Dyes	**Complies**
14	**Foreign Matter & Insect Damage**	% by mass	**0.0% (Nil)**	Free from visible foreign matter, moulds & live/dead insects (≤ 1.0%)	Manual Sorting / FSSAI Physical Examination	**Complies**

Technical Abbreviations: NVEE = Non-Volatile Ether Extract; BLQ = Below Limit of Quantification (Not Detected); LOQ = Limit of Quantification; MRL = Maximum Residue Limit; CFU/g = Colony Forming Units per gram; FSSAI = Food Safety and Standards Authority of India; BIS = Bureau of Indian Standards; HPLC-DAD = High-Performance Liquid Chromatography with Diode-Array Detection; ICP-MS = Inductively Coupled Plasma Mass Spectrometry.

SIDHI MARWADI PRIVATE LIMITED CIN U10795RJ2025PTC102887

REGISTERED OFFICE :
C/O SIDHI MARWADI, KHASRA NO. 1242/655 KUDI DHORU, KUDI, PIPAR ROAD, JODHPUR, RAJASTHAN, INDIA, 342606
CIN: U10795RJ2025PTC102887 | GSTIN: 08ABQCS2572P1ZE | FSSAI LIC. NO.: 12224999000329
8947914000, 9799956480 BUSINESS@SIDHIMARWADI.COM WWW.SIDHIMARWADI.COM

SCAN QR

SIDHI MARWADI PRIVATE LIMITED

Dedicated to Nature and Culture

4. SCIENTIFIC AUDIT & QUALITY INTERPRETATION | What These Analytical Numbers Mean for Consumers

- **Half the Permitted Crude Fibre (≈ 15.0% vs. ≤ 30.0% Limit) & Rich Natural Chilli Oils (NVEE ≥ 12.0%):** In commercial chilli grinding, stalks (pedicels), calyces, and spent exhausted husks are frequently ground into the powder, inflating crude fibre up to 28–30%. Sidhi Marwadi Red Chilli Powder exhibits only ≈ 15.0% crude fibre and ≥ 12.0% Non-Volatile Ether Extract (NVEE), proving that only whole, stemless, oil-rich fleshy chilli pods are ground without extracting valuable capsaicinoid and carotenoid oils.
- **100% Free from Carcinogenic Sudan Dyes (I–IV) & Synthetic Red Colours:** Adulterated market chilli powders often rely on banned industrial azo dyes (Sudan I, II, III, IV, Rhodamine B, or Oil Soluble Coal-Tar Dyes) to mask old, pale, or low-grade chillies. High-sensitivity HPLC-DAD / LC-MS/MS screening confirms Added Colour is Negative and Sudan Dyes are Below Limit of Quantification (BLQ), guaranteeing 100% natural crimson colour.
- **Ultra-Low Moisture (6.0%) & Zero Brick-Dust / Siliceous Grit (Acid-Insoluble Ash ≤ 0.2%):** Maintaining moisture at 6.0% (nearly half the 11.0% FSSAI ceiling) naturally prevents mould growth, caking, and colour oxidation without chemical preservatives. Furthermore, Total Ash at 4.0% (vs. ≤ 8.0%) and Acid-Insoluble Ash at ≤ 0.2% (vs. ≤ 1.3%) rule out any mineral adulteration such as brick powder, red ochre (geru), talc, or sand.
- **Zero Pesticide Residues, Heavy Metals, Aflatoxins & Ethylene Oxide (BLQ):** Red chillies are globally susceptible to Aflatoxin contamination if improperly sun-dried. Our strict post-harvest moisture control and multi-residue laboratory screening ensure Aflatoxins (B1 & Total), Heavy Metals (Pb, Cd, As, Hg), Crop Pesticides, and Ethylene Oxide (EtO) are all BLQ, alongside complete absence of Salmonella and E. coli.

5. QUALITY ASSURANCE DECLARATION & AUTHORIZED SIGNATORY | In-House Laboratory Verification & Transparency Notice

Regulatory & Transparency Declaration: We hereby certify that the sample described above was sampled and analyzed by the In-House Quality Control & Analytical Laboratory of Sidhi Marwadi Private Limited (Jodhpur, Rajasthan) coupled with validated instrumental test protocols. Based on the 14-point audit above, the product conforms to all mandatory quality and food safety parameters stipulated under FSSAI Regulation 2.9.3 (Chillies and Capsicum / Lal Mirchi Powder) and IS 2445. This report is published on www.sidhimarwadi.com for consumer education and batch transparency.

ANALYZED & PREPARED BY	REVIEWED & VERIFIED BY	APPROVED & AUTHORIZED BY
Quality Control Analyst In-House Analytical Lab Sidhi Marwadi Private Limited Date: 15/11/2026	Head – Quality Assurance (QA) Food Safety & Compliance Division Sidhi Marwadi Private Limited FSSAI Lic. No.: 12224999000329	For SIDHI MARWADI PRIVATE LIMITED DIRECTOR Authorized Signatory / Director Sidhi Marwadi Private Limited Jodhpur, Rajasthan - 342606 [Official Company Stamp / Seal]