



FOOD SAFETY REFERRAL LABORATORY ICAR-IIHR, BANGALORE



TC-16406



Report No: FSRL2025-93

Report Date: 23.09.2025

ULR: TC164062500000053F

TEST REPORT

| | | | |
|----------------------|--------------------|---------------------------|-----------------------------|
| Sample code | : FSRL20250916/103 | Customer provided details | : Tomato |
| Sample name | : Tomato | Received on | : 16.09.2025 |
| Sample quantity | : 1Kg | Analyzed between | : 16.09.2025-18.09.2025 |
| Sample packing | : Carton box | Customer Name and address | : Goutham P B |
| Condition on receipt | : Satisfactory | | Healthy Buddha |
| | | | Site 113/1, ITPL Main |
| | | | Road, AECS Layout, opp. |
| | | | Brooke field, Kundalahalli, |
| | | | Bengaluru- 560037 |

A) Type of Test: Chemical

| SI No. | Test Parameter | Test method | Result (mg/kg) |
|--------|----------------|----------------|----------------|
| 1 | Indoxacarb | FSRL-PR-SOP-09 | 0.024 |

*LOQ- Limit of quantification

List of pesticides analysed by LCMS-MS (LOQ-mg/kg)

| | | | |
|----------------------------|----------------------------|---------------------------|-----------------------------|
| Abamectin (0.01) | Acephate (0.01) | Acetamiprid (0.01) | Aldicarb (0.01) |
| Ametrictadin (0.01) | Azoxystrobin (0.01) | Bifenazate (0.01) | Bifenazatediazene (0.01) |
| Bitertanol (0.01) | Boscalid (0.01) | Buprofezin (0.01) | Carbaryl (0.01) |
| Carbofuran (0.01) | Carbofuran 3 hydroxy(0.01) | Carbendazim (0.01) | Carbosulfan (0.01) |
| Chlorantraniliprole (0.01) | Clothianidin (0.01) | Cyantraniliprole (0.01) | Cyazofamid (0.01) |
| Cyflufenamid (0.01) | Cymoxanil (0.01) | Cyprodinil (0.01) | Diafenthiuron (0.01) |
| Difenoconazole (0.01) | Dimethoate (0.01) | Dimethomorph (0.01) | Dinotefuran (0.01) |
| Diuron (0.01) | Dodine (0.01) | Edifenophos (0.01) | Emamectin benzoate (0.01) |
| Fenamidone (0.01) | Fenamiphos (0.01) | Fenamiphos sulfone (0.01) | Fenamiphos sulfoxide (0.01) |
| Fenazaquin (0.01) | Fenobucarb (0.01) | Fenpyroximate (0.01) | Fenthion (0.01) |
| Fenthion Sulfone (0.01) | Fenthion Sulfoxide (0.01) | Flonicamid (0.01) | Flubendiamide (0.01) |
| Flufenoxuron (0.01) | Fluopicolide (0.01) | Flupyradifurone (0.01) | Fluopyram (0.01) |
| Fluopyrambenzamide (0.01) | Forchlorfenuron (0.01) | Formothion (0.01) | Hexythiazox (0.01) |
| Imidacloprid (0.01) | Indoxacarb (0.01) | Iprovalicarb (0.01) | Isoproturon (0.01) |
| Kresoxim-methyl (0.01) | Linuron (0.01) | Malaoxon (0.01) | Mandipropamid (0.01) |
| Metaflumizone (0.01) | Metalaxyl (0.01) | Metalaxyl M (0.01) | Methamidophos (0.01) |
| Methomyl (0.01) | Methoxyfenozide (0.01) | Metrafenone (0.01) | Metribuzin (0.01) |
| Milbemectin A3 (0.01) | Milbemectin A4 (0.01) | Monocrotophos (0.01) | Myclobutanil (0.01) |
| Omethoate (0.01) | Oxadiazyl (0.01) | Oxycarboxin (0.01) | Oxydemeton Methyl (0.01) |



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| Penconazole (0.01) | Picoxystrobin (0.01) | Phorate (0.01) | Phorate sulfone(0.01) |
| Phorate sulfoxide (0.01) | Phosalone (0.01) | Phosphamidon (0.01) | Pretilachlor (0.01) |
| Primiphos Methyl (0.01) | Propanil (0.01) | Propargite (0.01) | Propiconazole (0.01) |
| Propuxur (0.01) | Pyraclostrobin (0.01) | Pyridalyl (0.01) | Quinalphos (0.01) |
| Spinosad (0.01) | Spirotetramat (0.01) | Tebuconazole (0.01) | Thiabendazole (0.01) |
| Thiacloprid (0.01) | Thiamethoxam (0.01) | Thiodicarb (0.01) | Thiophanate-methyl (0.01) |
| Triazophos (0.01) | Trichlorfon (0.01) | Tricyclazole (0.01) | Tridemorph (0.01) |
| Trifloxystrobin (0.01) | Zoxamide (0.01) | | |

Authorized by

Veena Rao U

Veena Rao U
Technical Manager
Chemical (Pesticide residue)

Approved by

Dr. Partha P. Choudhury

Dr. Partha P. Choudhury
Quality Manager

FOOD SAFETY REFERRAL LABORATORY
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Above results relate only to the items/sample tested as received.

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*****END OF REPORT*****

Tomato – Pesticide Residue Summary

Report: FSRL20250916/103

Product Tested: Tomato

Testing Method: Multi-Residue Pesticide Analysis (LC-MS/MS, GC-MS/MS)

Number of Residues Tested: ~250

Key Findings

- **Detected Residue:** Indoxacarb – 0.024 mg/kg
- **Maximum Residue Limit (MRL):** 0.5 mg/kg (FSSAI/EU)
- **Result:** Only 4.8% of the legal limit, well within safety standards.
- All other residues were reported as **Not Detected (ND)**.

Interpretation

Food Safety:

■ This batch of tomato is completely safe for consumption and meets all FSSAI/EU legal requirements.

Organic Compliance:

■ With residue just within the NPOP 5% rule, this batch is technically NPOP and PGS compliant (provided other organic practices are followed on the farm). Further reduction is recommended for future batches.

Why Minor Residues May Appear

Even in organic farming, tiny traces of pesticide residues can occasionally be found. This can happen because of:

- **Spray drift** from neighboring conventional farms
- **Soil history** where past pesticide use slowly breaks down over time
- **Shared irrigation water** carrying trace residues
- **Environmental contamination** from air or rain

These are unintended and unavoidable in many farming regions. What's important is that the levels remain well below legal safety limits and farmers are actively taking steps to

reduce them over time.