

CERTIFICATE OF ANALYSIS

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|-------------------|---------------------------------------|----------------------|-----------------------|
| P/I NO. & DATE | October 10, 2022 | TEST DATE: | October 10, 2022 |
| BUYER | SARANG TEJARAT INTERNATIONAL | DESCRIPTION OF GOODS | CARMINE 50% WS POWDER |
| MFG DATE/EXP DATE | October 10, 2022/ October 10, 2024 | BATCH NO. | 2335717340 |

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|---------------------|---|------------------|-----------|
| INS | 120 | CAS No. | 1390-65-4 |
| EC NO. | 215-724-4 | COLOUR INDEX | Dark red |
| Chemical Formula | C ₂₂ H ₂₀ O ₁₃ | Molecular Weight | 492.39 |
| Physical Appearance | Powder | Quantity | 500Kg |

| ITEMS | TEST REQUIREMENTS | INSO 740 | RESULTS |
|-------|---------------------------------------|---|----------|
| 1 | Solubility | The solubility of carmine preparations varies depending on the nature of the cations present. Products where the major cation is ammonium (ammonium carminate) are freely soluble in water at pH 3.0 and pH 8. Products where the major cation is calcium (calcium carminate) are very slightly soluble in water at pH 3.0 but freely soluble at pH 8.5 | Soluble |
| 2 | Color reactions | Pass the test | Conform |
| 3 | Loss on drying | Max 20% (135°Celsius , 3h) | 7,67 |
| 4 | Total Ash(*) | Max 12% | 10,3 |
| 5 | Protein(*) | Max 25% | 23,6 |
| 6 | Matter insoluble in dilute ammonia(*) | Max 1% | 0,84 |
| 7 | 4-aminocarminic acid(*) | Not more than 3% relative to carminic acid | Conform |
| 8 | Lead (Pb)(*) | Max 1,5 mg/kg | <0,032 |
| 8 | Mercury (Hg)(*) | Max 0,5 mg/kg | <0,005 |
| 9 | Cadmium (Cd)(*) | Max 0,1 mg/kg | <0,002 |
| 10 | Arsenic (As)(*) | Max 1mg/kg | <0,100 |
| 11 | Solvent residues(*) | Ethanol: Not more than 150 mg/Kg Methanol: Not more than 50 mg/Kg | Conform |
| 12 | Chlorides(*) | Negative per test | Negative |