

CERTIFICATE OF ANALYSIS

The Power to Question

Catalog Number: sc-394274
Lot Number: SAMPLE

Product Name: Sodium Citrate Tribasic Dihydrate (Molecular Biology Grade)

CAS Number: 6132-04-3

Molecular Formula: $C_6H_5O_7 \cdot 2H_2O \cdot 3Na$

Molecular Weight: 294.10

| Test | Specification | Result |
|-------------------------------|---|--------------------|
| Appearance | White / colorless fine crystals to crystals | Colorless crystals |
| Purity (Nonaqueous Titration) | 99.5 - 101.0% | 100.0% |
| рН | 7.5 - 9.0 | 8.4 |
| Residue | No residue (filter test) | Complies |
| Solubility | Clear colorless at 0.1 in water | Complies |
| Trace metal analysis | Consistent with requirements | Complies |
| UV Absorption | ≤ 0.01 at 260 nm ≤ 0.01 at 280 nm | 0.003 0.001 |
| Aluminum | ≤ 5 mg/kg (ICP) | < 5 mg/kg |
| Ammonium | ≤ 10 mg/kg (ion chromatography) | < 10 mg/kg |
| Arsenic | Arsenic traces: ≤ 0.1 mg/kg (MHS-AAS) | < 0.100 mg/kg |
| Barium | ≤ 5 mg/kg (ICP) | < 5 mg/kg |
| Bismuth | ≤ 5 mg/kg (ICP) | < 5 mg/kg |
| Cadmium | ≤ 10 mg/kg (ICP) | < 10 mg/kg |
| Cadmium | ≤ 5 mg/kg (ICP) | < 5 mg/kg |
| Chloride | ≤ 10 mg/kg | < 10 mg/kg |
| Chromium | ≤ 5 mg/kg (ICP) | < 5 mg/kg |
| Cobalt | ≤ 5 mg/kg (ICP) | < 5 mg/kg |
| Copper | ≤ 5 mg/kg (ICP) | < 5 mg/kg |
| Iron | ≤ 5 mg/kg (ICP) | < 5 mg/kg |

Satisfaction Guarantee: We appreciate your business and are committed to providing the highest level of quality and service. Any product that does not meet the performance standards indicated in our product literature will be replaced at no charge. Our policy is valid for one year from the date of your purchase.

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| Lead | ≤ 5 mg/kg (ICP) | < 5 mg/kg |
|---------------|---------------------------------------|-------------|
| Lithium | ≤ 5 mg/kg (ICP) | < 5 mg/kg |
| Magnesium | ≤ 5 mg/kg (ICP) | < 5 mg/kg |
| Manganese | ≤ 5 mg/kg (ICP) | < 5 mg/kg |
| Molybdenum | ≤ 5 mg/kg (ICP) | < 5 mg/kg |
| Nickel | ≤ 5 mg/kg (ICP) | < 5 mg/kg |
| Potassium | ≤ 100 mg/kg (ICP) | < 100 mg/kg |
| Sulfur | ≤ 50 mg/kg (as SO ₄ , ICP) | < 50 mg/kg |
| Water Content | 11 - 13% | 11.2% |
| Zinc | ≤ 5 mg/kg (ICP) | < 5 mg/kg |
| DNase | Not detectable | Complies |
| Phosphatase | Not detectable | Complies |
| Protease | Not detectable | Complies |
| RNase | Not detectable | Complies |

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