

**EDTA Disodium Salt Dihydrate****PG-5010-500ML**

**EDTA Disodium Salt Dihydrate** (Ethylenediaminetetraacetic Acid Disodium Salt Dihydrate) is a high-purity chelating agent widely used in molecular biology, biochemistry, microbiology, analytical chemistry, and cell culture applications. It effectively binds divalent and trivalent metal ions such as  $\text{Ca}^{2+}$ ,  $\text{Mg}^{2+}$ ,  $\text{Fe}^{3+}$ , and  $\text{Zn}^{2+}$ , preventing metal-catalyzed reactions and inhibiting nuclease activity. It is a key component of TE Buffer, TAE Buffer, and various molecular biology reagents.

---

| Parameter | Specification |
|-----------|---------------|
|-----------|---------------|

|                     |                              |
|---------------------|------------------------------|
| <b>Product Name</b> | EDTA Disodium Salt Dihydrate |
|---------------------|------------------------------|

|                      |                                                         |
|----------------------|---------------------------------------------------------|
| <b>Chemical Name</b> | Ethylenediaminetetraacetic Acid Disodium Salt Dihydrate |
|----------------------|---------------------------------------------------------|

|                          |                                                                                       |
|--------------------------|---------------------------------------------------------------------------------------|
| <b>Molecular Formula</b> | $\text{C}_{10}\text{H}_{14}\text{N}_2\text{Na}_2\text{O}_8 \cdot 2\text{H}_2\text{O}$ |
|--------------------------|---------------------------------------------------------------------------------------|

|                         |              |
|-------------------------|--------------|
| <b>Molecular Weight</b> | 372.24 g/mol |
|-------------------------|--------------|

|                   |                          |
|-------------------|--------------------------|
| <b>Appearance</b> | White crystalline powder |
|-------------------|--------------------------|

|              |               |
|--------------|---------------|
| <b>Assay</b> | $\geq 99.0\%$ |
|--------------|---------------|

|                   |                  |
|-------------------|------------------|
| <b>Solubility</b> | Soluble in water |
|-------------------|------------------|

|                         |           |
|-------------------------|-----------|
| <b>pH (1% Solution)</b> | 4.0 – 5.5 |
|-------------------------|-----------|

|                     |               |
|---------------------|---------------|
| <b>Heavy Metals</b> | $\leq 10$ ppm |
|---------------------|---------------|

|                       |              |
|-----------------------|--------------|
| <b>Loss on Drying</b> | $\leq 8.0\%$ |
|-----------------------|--------------|

|                   |           |
|-------------------|-----------|
| <b>CAS Number</b> | 6381-92-6 |
|-------------------|-----------|

**Safety**

Harmful if inhaled, swallowed, or absorbed through skin. Suspected carcinogen. May cause liver, kidney, and central nervous system damage following prolonged or repeated exposure. Use in a well-ventilated area and wear appropriate PPE including gloves, lab coat, and safety goggles. Avoid contact with skin, eyes, and clothing. Store away from heat and incompatible materials.