

Technical Data Sheet (TDS)

1. Product Overview

Product Name: Nandrolone Phenylpropionate **English Name:** Nandrolone Phenylpropionate **CAS Number:** 62-90-8 **Molecular Formula:** C₂₇ H₃₄O₃ **Molecular Weight:** 406.56 g/mol **Product**

Characteristics: Synthetic anabolic-androgenic steroid (AAS), esterified form of nandrolone with phenylpropionic acid. White crystalline powder, insoluble in water, soluble in chloroform, ethanol and vegetable oils. Fast-acting anabolic steroid with moderate androgenic activity, exhibits strong muscle-building, anti-catabolic and bone-strengthening effects. Stable under normal storage conditions, suitable for pharmaceutical formulation and research use.

2. Technical Specifications (Complies with Industrial Standards)

Appearance: White to creamy white crystalline powder **Assay (HPLC):** ≥ 98.0% **Melting Point:** 93-99°C **Loss on Drying:** ≤ 0.5% **Residue on Ignition:** ≤ 0.1% **Heavy Metals (Pb):** ≤ 10 ppm **Heavy Metals (As):** ≤ 2 ppm **Related Substances (Total):** ≤ 1.5% **Related Substances (Single):** ≤ 0.5% **Optical Rotation (c=1, CHCl₃):** +48° to +56° **Solubility:** Soluble in chloroform/ethanol, slightly soluble in vegetable oils, insoluble in water **Storage Stability:** Stable for 24 months at 2-8°C (sealed); stable for 12 months at room temperature (15-25°C)

3. Product Advantages

High Purity: Assay ≥98.0%, low single and total related substances, consistent quality.

Fast-Acting: Esterified form with rapid absorption and onset of action in vivo.

Good Solubility: Soluble in common organic solvents and vegetable oils, easy for injectable formulation.

Strong Anabolic Activity: High anabolic to androgenic ratio, minimal androgenic side effects.

Good Stability: Long shelf life under recommended storage conditions.

4. Application Fields

Pharmaceutical Industry: Raw material for veterinary and human injectable pharmaceutical formulations (for muscle wasting, osteoporosis, anemia).

Research & Development: Laboratory research on anabolic steroid activity, hormone mechanism and drug development.

Fine Chemicals: Intermediate for the synthesis of nandrolone derivatives and related steroids.

5. Usage Methods

Pharmaceutical Formulation: Dissolve in vegetable oil (e.g., sesame oil, cottonseed oil) with appropriate excipients to prepare injectable formulations; dosage adjusted based on pharmaceutical specifications.

Research Use: Prepare standard solutions with chloroform/ethanol for laboratory tests; dosage determined by research protocol.

Recommended Concentration: 50-200 mg/mL for injectable formulation (vegetable oil base).

6. Packaging & Storage

Packaging Specifications:

- 100 g/bottle (HDPE bottle with aluminum foil seal)
- 500 g/bottle (HDPE bottle with aluminum foil seal)
- 1 kg/tin can (sealed tin can with inner plastic bag)
- 5 kg/drum (fiber drum with inner plastic bag)
- Custom packaging available upon request.

Storage Conditions:

- Store in a cool, dry, dark place at 2-8°C, in a tightly sealed original container to avoid moisture and light.
 - For short-term use (≤ 3 months), may be stored at 15-25°C (room temperature), away from direct sunlight and heat.
 - Keep away from open flame, oxidizing agents and strong acids/bases.
 - Store separately from food, beverages, aquatic products and raw materials for edible use.
- Shelf Life:** 24 months (2-8°C, unopened); 12 months (15-25°C, unopened).

7. Quality Assurance

- Manufactured in accordance with ISO 9001 quality management system and GMP guidelines for pharmaceutical raw materials.
- Each batch is fully tested and accompanied by a Certificate of Analysis (COA) to ensure compliance with industrial standards.
- Provide technical support for product formulation, solubility optimization and application.