

Technical Data Sheet (TDS)

1. Product Overview

Product Name: Methyltestosterone **English Name:** Methyltestosterone **CAS Number:** 58-18-4
Molecular Formula: C₂₀ H₃₀ O₂ **Molecular Weight:** 302.45 g/mol **Product Characteristics:** Synthetic anabolic-androgenic steroid (AAS), a methylated derivative of testosterone. White to off-white crystalline powder, odorless, insoluble in water, soluble in ethanol, chloroform and vegetable oils. Stable under recommended storage conditions, with strong androgenic and anabolic activity, able to promote protein synthesis and muscle growth. It is a key raw material for steroid drug formulation with high purity and stable quality.

2. Technical Specifications (Complies with Industrial Standards)

Appearance: White to off-white crystalline powder **Assay (HPLC):** ≥ 98.5% **Melting Point:** 163-167°C **Loss on Drying:** ≤ 0.5% **Residue on Ignition:** ≤ 0.1% **Heavy Metals (Pb):** ≤ 10 ppm **Heavy Metals (As):** ≤ 2 ppm **Related Substances (Total):** ≤ 1.0% **Optical Rotation (c=1, ethanol, 25°C):** +79° to +85° **Solubility:** Insoluble in water, soluble in ethanol/chloroform, slightly soluble in vegetable oils **Storage Stability:** Stable for 24 months at 2-8°C (sealed, dark condition) **pH Value:** Not applicable (insoluble in water)

3. Product Advantages

High Purity: Assay ≥ 98.5%, low impurity content, consistent batch-to-batch quality.

Strong Biological Activity: High androgenic and anabolic potency, effective for pharmaceutical formulation.

Good Stability: Long shelf life under recommended storage, no easy degradation.

Excellent Solubility: Soluble in common organic solvents, easy for various formulation development.

Standardized Production: Manufactured in accordance with industrial quality standards, complete testing data.

4. Application Fields

- **Pharmaceutical Industry:** Raw material for human and veterinary pharmaceutical formulations (for hypogonadism, muscle wasting, osteoporosis treatment).
- **Research & Development:** Laboratory research on steroid hormone mechanism, anabolic-androgenic activity testing and new drug development.
- **Fine Chemicals:** Intermediate for the synthesis of other steroid derivatives and modified AAS products.

5. Usage Methods

- **Pharmaceutical Formulation:** Dissolve in appropriate organic solvent (ethanol/chloroform) or vegetable oil according to formulation requirements, adjust the concentration and dosage based on specific drug specifications.
- **Research Use:** Prepare standard solutions with ethanol (1-10 mg/mL) for laboratory tests, the specific dosage is determined by the research protocol.
- **Note:** Strictly follow the relevant regulations for use, only for industrial and research purposes, not for unauthorized use.

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/fiber drum (sealed fiber drum with inner plastic bag)
- Custom packaging available upon request.

Storage Conditions:

- Store in a cool, dry, dark place at 2-8°C, keep the container tightly sealed to avoid moisture and light.
- Keep away from heat, open flame, strong oxidizing agents, strong acids and strong bases.
- Store separately from food, beverages, aquatic products and raw materials for edible use.**Shelf Life:** 24 months (unopened, under specified storage conditions).**Transportation:** Non-hazardous for transport under sealed condition; avoid high temperature, sunlight and collision during transportation.

7. Safety & Protection

- The product is a synthetic steroid, avoid direct skin contact and dust inhalation during handling.
- Wear nitrile rubber gloves, safety glasses and dust mask for large-scale handling or prolonged contact.
- In case of skin contact: Rinse the affected area with plenty of soap and water; remove contaminated clothing and wash before reuse.
- In case of eye contact: Rinse eyes thoroughly with plenty of running water for 10-15 minutes; consult a doctor if irritation persists.
- Do not ingest; if accidentally swallowed, rinse mouth with water and seek medical advice immediately.

8. Quality Assurance

- The product is manufactured in accordance with ISO 9001 quality management system standards.
- Each batch of product is fully tested and accompanied by a Certificate of Analysis (COA) to ensure compliance with industrial standards.
- Provide professional technical support for product application, including formulation optimization and usage guidance.
- Undertake quality responsibility for qualified products under normal storage and use conditions.