

## Technical Data Sheet (TDS)

### 1. Product Overview

- Product Name: Methyl Benzoate
- English Name: Methyl Benzoate
- CAS Number: 93-58-3
- Formula:  $C_8H_8O_2$
- Molecular Weight: 136.15 g/mol
- Product Characteristics: Colorless clear liquid with a pleasant aromatic odor. High-purity benzoate ester with excellent solvency and fragrance properties. Flammable, moderately toxic, and compatible with organic solvents. Suitable for fragrances, solvents, and chemical synthesis.

### 2. Technical Specifications

Item	Specification
Appearance	Colorless clear liquid
Purity (GC)	$\geq 99.0\%$
Water Content	$\leq 0.1\%$
Density (20°C)	1.083-1.085 g/cm <sup>3</sup>
Boiling Range	198.0-201.0°C
Flash Point (Closed Cup)	82°C
Viscosity (20°C)	2.5 mPa·s
Non-Volatile Residue	$\leq 0.005\%$
Heavy Metals (Pb)	$\leq 0.5$ ppm
Heavy Metals (As)	$\leq 0.1$ ppm
Acidity (as $C_6H_5COOH$ )	$\leq 0.001\%$
Solubility	Soluble in organic solvents; slightly soluble in water

### 3. Product Advantages

1. High Purity: Low impurity content ensures stable fragrance and solvency.
2. Pleasant Aroma: Natural floral scent, ideal for fragrances and cosmetics.
3. Excellent Solvency: Dissolves organic compounds, suitable for solvents and coatings.
4. Chemical Stability: Stable under normal storage/use conditions.

### 4. Application Fields

- Cosmetics & Fragrances: Fragrance ingredient in perfumes, lotions, and soaps.
- Industrial Solvent: Coatings, inks, adhesives, and resin processing.
- Chemical Synthesis: Precursor for pharmaceuticals, agrochemicals, and benzoic acid derivatives.
- Laboratory Research: Analytical reagent and reaction solvent.

### 5. Usage Methods

- Dosage: 0.1-10% concentration (fragrances); 20-100% (solvents/synthesis).

- Application: Mix directly with ingredients; use in closed systems for synthesis.
- Optimal Conditions: Operate in well-ventilated areas; avoid ignition sources.

### 6. Packaging & Storage

- Packaging: 5L HDPE cans, 20L steel drums, 200L steel drums, 1000L IBC totes (UN-approved).
- Storage: Cool, dry, well-ventilated warehouse ( $\leq 30^{\circ}\text{C}$ ); sealed, away from heat/sparks/oxidizers.
- Shelf Life: 12 months (unopened, specified conditions).
- Transportation: Classified as flammable hazardous goods; transport per regulations.

### 7. Safety & Protection

- Flammable and moderately toxic: No smoking near storage/use areas; prohibit open flames.
- Wear chemical safety goggles, nitrile rubber gloves, and organic vapor respirator.
- Avoid inhalation and skin contact; ensure local exhaust ventilation.
- In case of exposure, follow first aid measures in MSDS.

### 8. Quality Assurance

- Manufactured under ISO 9001 quality management system.
- Each batch comes with a COA for compliance verification.
- Provide technical support for fragrance formulation and synthesis optimization.