



TDS – Candle Wax (Paraffin Candle Wax)

1) Product Identification

- **Product Name:** Candle Wax (Paraffin Wax for Candle Making)
- **Product Type:** Petroleum-derived wax (semi-refined or fully refined, depending on grade)
- **Recommended Use:** Candle manufacturing (container candles, pillars, tealights), wax blends

2) Typical Technical Properties (Specification)

Note: Values vary by grade (semi-refined vs fully refined) and supplier. Use your COA for final numbers.

Property	Typical Range	Test Method
Appearance	White to off-white solid	Visual
Odor	Mild petroleum odor (or nearly odorless for fully refined)	Organoleptic
Oil Content	0.5–1.5% (fully refined) / 1.5–3.0% (semi-refined)	ASTM D721
Melting Point (°C)	52–64 °C (grade dependent)	ASTM D87
Congealing Point (°C)	50–62 °C	ASTM D938
Penetration @ 25°C (dmm)	10–25 (grade dependent)	ASTM D1321
Color (Saybolt)	+20 to +30 (typical for fully refined)	ASTM D156
Flash Point (°C)	>200 °C (typical)	ASTM D92
Kinematic Viscosity @ 100°C (cSt)	3–6 (typical)	ASTM D445
Sulfur Content	Low (typical)	ASTM D4294 (if required)
Solubility in Water	Insoluble	—



3) Performance & Benefits (For Candle Makers)

- Clean, stable burn (especially fully refined grades)
- Good fragrance holding and release (depending on blend and oil content)
- Smooth surface finish with proper pouring temperature
- Easy blending with stearic acid, microcrystalline wax, and polymers

4) Recommended Processing Guidelines

- **Melting:** Heat gently to **70–85°C** (avoid overheating).
- **Fragrance addition:** Typically **60–75°C** (depends on fragrance type).
- **Pouring:** Often **55–75°C** depending on mold/container and desired finish.
- **Cooling:** Slow cooling reduces shrinkage, frosting, and sinkholes.

5) Packaging

- Slabs / blocks, cartons, or bags (common for wax)
- Drums available for molten/industrial handling (less common for retail candle wax)

6) Storage & Shelf Life

- Store in a cool, dry place away from direct sunlight and strong odors.
- **Shelf life:** Typically **5 years** when stored properly.