



Technical Data Sheet (TDS)

Paraffin Wax (Fully Refined & Semi Refined Grades)

This Technical Data Sheet defines the typical physical and chemical properties of Basekim's industrial-grade Paraffin Wax. This product undergoes advanced catalytic hydrotreating and solvent de-oiling processes to ensure superior purity, high thermal stability, and low odor profiles across all available grades.

Product Applications

Paraffin wax functions as a highly adaptable raw material across multiple global sectors:

- **Candle Manufacturing:** Provides structure, excellent fragrance retention, and a clean, predictable burn profile for pillar and container candles.
- **Rubber & Elastomers:** Acts as a migratory anti-ozonant wax to shield tires and industrial rubber components from atmospheric cracking.
- **Packaging & Coatings:** Forms an effective, hydrophobic moisture barrier for corrugated boxes, food wraps, and industrial papers.
- **PVC Processing:** Serves as an external lubricant to lower friction during plastic extrusion, improving surface finish and machinery throughput.
- **Cosmetics & Pharmaceuticals:** Functions as a high-purity emollient base for therapeutic skin treatments, creams, and ointments.

Key Features & Benefits

- **Low Volatility:** Minimizes smoking and vapor emissions during high-temperature blending and processing.
- **Excellent Hydrophobicity:** Delivers exceptional water resistance for structural coatings and moisture-barrier applications.
- **Sharp Melting Point:** Transitions rapidly from solid to low-viscosity liquid state, streamlining manufacturing workflows.
- **Chemical Inertness:** Resists oxidation and displays excellent compatibility with polymers, resins, and synthetic lubricants.



Technical Specifications & Typical Properties

The following table presents typical analysis values for our primary refinement grades. These values represent standard operational baselines and do not constitute a binding product warranty.

Property	Test Method	Fully Refined Grade	Semi Refined Grade
Melting Point	ASTM D87 / ISO 2207	58.0°C – 60.0°C	60.0°C – 62.0°C
Oil Content	ASTM D721	0.45% max	1.20% max
Saybolt Color	ASTM D156	+28 min	+22 min
Needle Penetration (at 25°C)	ASTM D1321	14 – 18 (0.1 mm)	16 – 22 (0.1 mm)
Kinematic Viscosity (at 100°C)	ASTM D445	3.8 – 4.4 mm ² /s	4.0 – 4.6 mm ² /s
Odor Rating	ASTM D1833	0 – 1	1 – 2
Flash Point (COC)	ASTM D92	> 220°C	> 210°C

Note: Custom melting point ranges (from 52°C up to 66°C) are available upon request to meet specific formulation demands.

Handling, Packaging & Storage Guidelines

Packaging Options

- **Solid Slabs:** 5 kg or 25 kg blocks packed inside durable woven polypropylene bags or heavy-duty cardboard boxes loaded on pallets.
- **Granules/Pellets:** 25 kg multi-wall paper or plastic bags engineered for rapid automatic dosing systems.
- **Liquid Bulk:** Dispatched via insulated, heated ISO tank containers or road tankers for immediate high-volume factory consumption.

Storage Conditions

Store the product in a dry, well-ventilated warehouse facility. Keep pallets away from direct sunlight, open flames, and localized heat sources. Maintain storage temperatures below 35°C to prevent slab fusion, block deformation, or minor oil migration within semi-refined grades.



Shelf Life

When stored properly in its original, unopened packaging, the product retains its chemical stability and functional characteristics for at least 36 months from the date of manufacture.