



## Technical Data Sheet

### Semi Refined Paraffin Wax 1-1.5%

**Product Name:** Paraffin Wax 1-1.5%

**Alternative Name:** Semi Refined Paraffin Wax 1-1.5%

**Product Type:** Petroleum-based industrial wax

**Grade:** Semi refined, low oil content

**Appearance:** White to off-white solid slabs / blocks / granules

**Application:** Candles, packaging, rubber, coatings, polishes, textile, leather, masterbatch, industrial blending

### 1. Product Description

Semi Refined Paraffin Wax 1-1.5% is a low-oil paraffin wax produced from petroleum-derived wax fractions through refining and deoiling processes. It offers a balanced combination of hardness, clean appearance, smooth melting behavior, and cost efficiency.

This grade contains approximately 1% to 1.5% oil, which gives it better firmness and cleaner performance than higher-oil semi refined waxes. Manufacturers use it in candle production, paper coating, rubber protection, polish manufacturing, textile finishing, leather treatment, and many other industrial applications.

### 2. Typical Properties

Property	Typical Value	Test Method
Oil Content	1.0% – 1.5%	ASTM D721
Melting Point	58°C – 62°C	ASTM D87 / ASTM D938
Color	White to off-white	Visual / ASTM D1500
Appearance	Solid slabs / blocks / granules	Visual
Penetration at 25°C	12 – 18 dmm	ASTM D1321
Kinematic Viscosity at 100°C	4 – 6 cSt	ASTM D445
Flash Point	Min. 200°C	ASTM D92
Odor	Mild / characteristic	Organoleptic
Moisture Content	Max. 0.2%	ASTM D95
Ash Content	Max. 0.05%	ASTM D482



Property	Typical Value	Test Method
Congealing Point	56°C – 60°C	ASTM D938
Solubility in Water	Insoluble	—
Solubility in Organic Solvents	Soluble in many hydrocarbons	—

**Note:** Values are typical and may vary slightly by batch, origin, production method, and customer specification.

### 3. Chemical and Physical Characteristics

Item	Description
Chemical Nature	Mixture of saturated hydrocarbons
Base Material	Petroleum wax
Refining Level	Semi refined
Physical Form	Solid at room temperature
Texture	Firm, waxy solid
Color Range	White to light cream
Oil Content Category	Low oil content
Water Solubility	Insoluble
Stability	Stable under normal storage conditions
Reactivity	Non-reactive under normal use

### 4. Main Benefits

Semi Refined Paraffin Wax 1-1.5% offers:

- Low oil content for better hardness and cleaner finish
- Smooth melting and easy processing
- Good compatibility with dyes, fragrances, polymers, oils, and additives
- Moisture resistance for paper and packaging coatings
- Protective film formation for rubber and surface applications
- Cost-effective performance compared with fully refined wax
- Suitable quality for high-volume industrial production
- Stable behavior in blending, coating, molding, and polishing processes



## 5. Recommended Applications

### Candle Manufacturing

Used in pillar candles, molded candles, religious candles, decorative candles, utility candles, and blended candle formulas.

### Packaging and Paper Coating

Used to improve water resistance, gloss, smoothness, and protective barrier properties in paper, cardboard, and packaging materials.

### Rubber Industry

Used as a processing aid and protective wax in rubber compounds. It supports anti-cracking performance by forming a protective surface layer.

### Polish Production

Used in shoe polish, floor polish, furniture polish, car polish, metal polish, and wax-based surface care products.

### Coatings and Surface Protection

Used in industrial coatings, hot-melt systems, wood protection, metal protection, and water-repellent formulations.

### Textile and Leather

Used for lubrication, finishing, water resistance, soft handle improvement, and surface treatment.

### Plastic and Masterbatch

Used as a lubricant, dispersing aid, and processing modifier in selected polymer and pigment systems.

## 6. Packaging Options

Common packaging options include:



Packaging Type	Typical Weight
PP / PE Bags	25 kg
Cartons	25 kg
Slabs in Bags	25 kg
Blocks on Pallets	As requested
Jumbo Bags	Subject to availability

Packaging can vary based on supplier, destination, shipment method, and customer request.

## 7. Storage Conditions

Store Semi Refined Paraffin Wax 1-1.5% in a clean, dry, and well-ventilated warehouse.

Recommended storage conditions:

- Keep away from direct sunlight.
- Keep away from heat sources and open flames.
- Store away from strong odors and chemicals.
- Protect from dust, moisture, and contamination.
- Keep packaging closed when not in use.
- Avoid excessive stacking pressure that may deform slabs or blocks.

## 8. Handling Guidelines

Use normal industrial hygiene practices during handling.

- Avoid prolonged skin contact with hot molten wax.
- Use heat-resistant gloves when handling melted material.
- Provide proper ventilation during heating and processing.
- Do not overheat the wax above recommended processing temperatures.
- Keep the material away from ignition sources.
- Use clean melting tanks and tools to prevent contamination.



## 9. Safety Information

Semi Refined Paraffin Wax 1-1.5% is generally stable and safe under normal industrial handling conditions. However, molten wax can cause burns, and overheated wax may release fumes.

Safety Item	Information
Hazard Class	Not classified as hazardous under normal conditions
Main Risk	Burns from molten wax
Fire Risk	Combustible at high temperature
Recommended PPE	Gloves, safety glasses, protective clothing
Ventilation	Recommended during melting
First Aid Skin Contact	Cool affected area with water if hot wax contacts skin
First Aid Eye Contact	Rinse with clean water and seek medical advice if irritation continues
Inhalation	Move to fresh air if fumes cause discomfort

For full safety instructions, always refer to the official SDS before use.

## 10. Transportation Information

Item	Information
Transport Classification	Usually non-dangerous goods
UN Number	Not regulated under normal solid wax transport
Shipping Form	Solid slabs, blocks, or granules
Transport Mode	Road, sea, rail, or air subject to regulations
Protection During Transport	Keep dry, cool, and away from heat

Transport classification may vary by country, regulation, and product documentation.

## 11. Quality Control

Each batch should be checked against agreed specifications before shipment. Common quality control tests include:

- Oil content
- Melting point



- Color
- Penetration
- Viscosity
- Moisture
- Odor
- Appearance
- Packaging condition

A Certificate of Analysis can be issued based on batch test results.

## 12. Shelf Life

**Recommended Shelf Life:** 24 months from production date under proper storage conditions.

The product may remain usable beyond this period if stored correctly and retested before use.