

## Technical Data Sheet (TDS)

### - Patchouli Oil

**Product Name:** Patchouli Oil **English Name:** Patchouli Oil **CAS Number:** 8014-89-7 **MDL Number:** MFCD00148101 **Main Component:** Patchoulol (C<sub>15</sub> H<sub>26</sub> O, CAS 5986-55-0, ≥25%) **Revision Date:** 22 FEB 2026

### 1. Product Overview

SIGALD Patchouli Oil is a premium natural essential oil obtained by steam distillation of the dried leaves of *Pogostemon cablin* (Blanco) Benth. A native of Southeast Asia, this oil is renowned for its rich, earthy, musky-woody aroma and excellent fixative properties. It is a dark amber, viscous liquid with a high patchoulol content (typically 30-35%). Unlike many essential oils, Patchouli Oil improves with age, developing a deeper, more complex fragrance. It is a staple in the fragrance industry for oriental, woody, and unisex perfumes and is widely used in cosmetics, aromatherapy, and as a natural insect repellent. Our product is produced under GMP conditions and complies with IFRA standards.

#### Key Benefits:

- **Superior Fixative:** Extends the longevity of fragrances in finished products.
- **Age-Defying:** Improves in aroma quality over time (does not spoil easily).
- **Multi-Functional:** Possesses natural antifungal, antibacterial, and insect-repellent properties.
- **High Purity:** Steam-distilled, no solvents, no additives.

### 2. Technical Specifications

Parameter	Specification	Test Method
Appearance	Dark amber to brown viscous liquid	Visual
Odor	Characteristic earthy, musky, woody	Sensory
Patchoulol Content	≥ 25.0% (Typical: 32.8%)	GC
Relative Density (20/20°C)	0.950 - 0.970	Pycnometer
Refractive Index (20°C)	1.5050 - 1.5150	Abbe Refractometer
Optical Rotation (20°C)	-60.0° to -45.0°	Polarimeter
Acid Value	≤ 5.0 mg KOH/g	Titration
Water Content	≤ 0.5%	Karl Fischer
Heavy Metals (Pb)	≤ 5 ppm	AAS
Solubility	Soluble in 95% Ethanol (1:5)	Visual

### 3. Application Fields & Recommended Dosage

Patchouli Oil is primarily valued for its fragrance and fixative properties. **Note: Due to potential skin sensitization, strict adherence to dilution levels is mandatory.**

Industry	Application	Recommended Dosage (%)
Fine Fragrance	Perfume, Eau de Parfum, Cologne	2.0 - 15.0%
Cosmetics	Soaps, Shampoos, Lotions, Candles	0.5 - 3.0%
Aromatherapy	Diffusers, Massage Oils (diluted)	0.5 - 2.0%
Household	Incense, Air Fresheners, Insect Repellents	1.0 - 10.0%
Food & Beverage	Alcoholic beverages, Confectionery (trace)	0.001 - 0.01%

### 4. Usage Guidelines & Processing



# NEWAY SINOPHC TECH. LIMITED

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1. **Solubility:** Patchouli Oil is **insoluble in water**. It dissolves well in ethanol, propylene glycol, and fixed oils (e.g., jojoba, sweet almond oil).
2. **Incorporation:**
  - For aqueous formulations (e.g., shampoos), first dissolve the oil in a solubilizer (e.g., polysorbate 20) or alcohol before adding to the water phase.
  - Due to its high viscosity, warm the oil slightly (40-50°C) to reduce viscosity and ease mixing.
3. **Compatibility:**
  - **Compatible with:** Most fragrance materials, resins, and fixatives.
  - **Avoid:** Strong alkaline conditions (pH > 8.0), which may cause hydrolysis.
4. **Sensitization Warning: Always perform a patch test** on human volunteers before launching a new cosmetic product containing this oil. Adhere to IFRA guidelines for maximum use levels in leave-on products.

## 5. Packaging & Storage

### 5.1 Packaging Specifications

Grade	Packaging
Trial	10mL, 30mL Amber Glass Bottles
Commercial	100mL, 500mL, 1L Amber Glass Bottles
Bulk	5L, 25L Light-proof HDPE Drums; 200L Iron Drums

### 5.2 Storage Conditions

- **Temperature:** Store in a cool, dark place at 10-25°C. Avoid direct sunlight and heat.
- **Handling:** Keep tightly sealed when not in use to prevent oxidation (though slight darkening is natural and desirable).
- **Shelf Life:**
  - **Unopened:** 36 months from date of manufacture. The oil will darken and the aroma will mature over time.
  - **Opened:** 12 months. Store in a cool place and minimize air exposure.

## 6. Quality Assurance & Regulatory Compliance

- **Manufacturing:** Produced in an ISO 9001 certified facility using steam distillation.
- **Compliance:**
  - **IFRA:** Compliant with the International Fragrance Association standards (sensitization labeling required).
  - **EU:** REACH registered, compliant with Cosmetics Regulation 1223/2009.
  - **US:** TSCA listed, FDA approved for food use (21 CFR).
- **Documentation:** Each batch is accompanied by a **Certificate of Analysis (COA)**.

## 7. Supplier Information

- **Supplier:** NEWAY SINOPHC TECH. LIMITED
- **Address:** RM. 204, BUILDING 3, NO. 188, AONA RD., CHINA (SHANGHAI) PILOT FREE TRADE ZONE
- **Telephone:** +86-021-50350029
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- **Technical Support:** Our team provides guidance on fragrance formulation and IFRA compliance