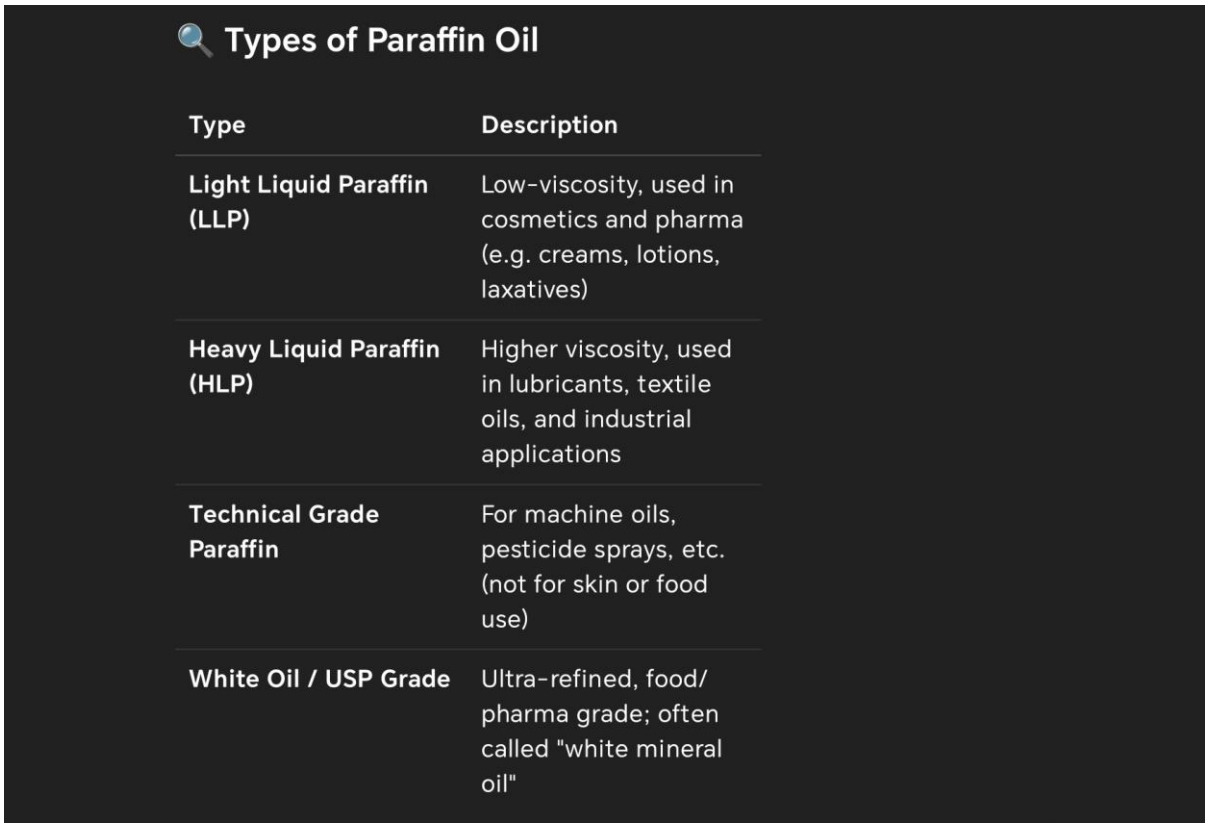
Cosmotics Raw Material

- PARAFFIN OIL

Paraffin oil, also known as liquid paraffin or mineral oil, is a colorless, odorless, tasteless hydrocarbon liquid derived from refined petroleum. It is stable, non-
reactive, and widely used in industrial, cosmetic, pharmaceutical, and agricultural applications.



馃 T Main Uses of Paraffin Oil

1. Cosmetic Industry
Moisturizers
Baby oil
Makeup removers
Hair oils

2. Pharmaceutical Industry
Laxative syrups
Skin treatments (eczema, psoriasis)

Ointments

3. Industrial Applications
Machinery lubricant
Transformer oils (with additives)
Textile lubricants
Plastic and rubber processing aids

4. Agriculture
Spray oils (pesticide adjuvant)
Crop protection emulsions

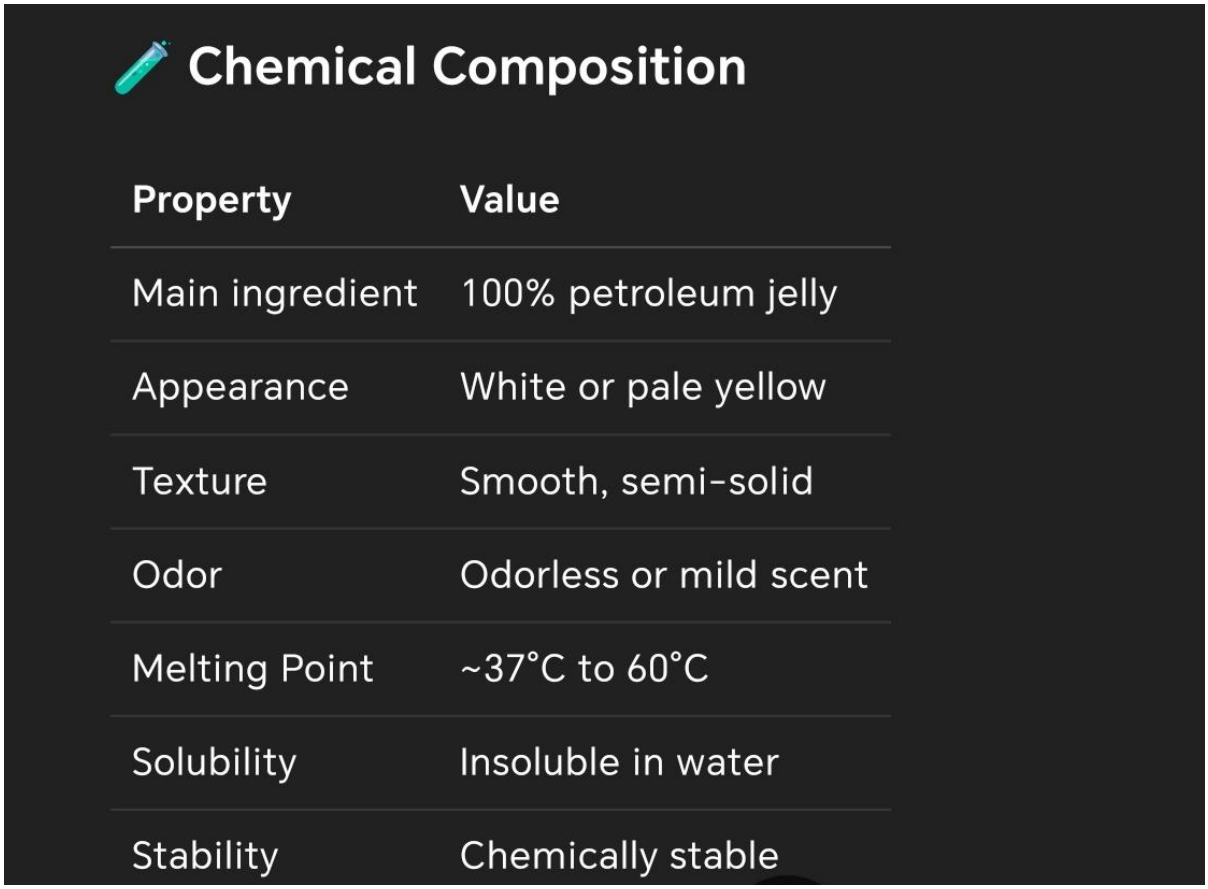
5. Food Industry (White Oil Grade)
Food packaging
Lubrication of food machinery (NSF-H1 grade)
Dough divider oils





- VASLINE

Vaseline is a brand name for petroleum jelly, a semi-solid mixture of hydrocarbons derived from petroleum refining. It was invented in the 19th century and is used worldwide for skin protection, healing, and moisturizing.



T Uses of Vaseline

Medical & Skin Care
Healing dry, cracked skin
Lips balm and lip protection
Prevents diaper rash
Wound protection (creates a barrier against dirt/bacteria)
Softening heels, elbows, hands
Reduces friction for skin rubbing

Cosmetics
Makeup remover
Brow gel

Lip gloss base
Highlighter

锞叅 Industrial/Household

Lubricant for zippers, hinges
Protects batteries and metal from rust
Polishes leather and shoes

鈔€ Is Vaseline Safe?

Yes, refined petroleum jelly (USP grade) is:
Non-toxic
Hypoallergenic
Non-comedogenic (won 鈥樋 clog pores)







- GRYCLINE

Chemical name: Glycerol (1,2,3 鈥德 ropanetriol), a simple triol
Appearance: Colorless, odorless, viscous liquid with a sweet taste
Formula: C 鈧僅鈧圤鈧€, molar mass ~92 鈥痝/mol
Properties: Hygroscopic, water 鈥憁 iscible, density ~1.26 鈥痝/cm 鲁, melting ~17.8 鈥□癈, boiling ~290 鈥□癈

馃彔 Main Applications

1. Food & Beverage

Used as a sweetener (鈮
€60% as sweet as sucrose), humectant to retain moisture, texture enhancer in cakes, icings, candies, beverages, canned goods, meat and dairy product s
Recognized in food labeling as E422, low glycemic index, calorie ~4.3 鈥疧 cal/g

1. Cosmetics & Personal Care

Key humectant and emollient in lotions, creams, soaps, shampoos 鈥攁 ttracts water to skin and hair
Softens skin, reduces water loss 鈥撘
idely used in creams, masks, hair treatments

1. Pharmaceutical & Medical

Functions as excipient, solvent, sweetener, preservative in syrups, lozenges, ointments, suppositories
Used in rectal suppositories for constipation, in cough medicines, eye/ear drops
GRAS by FDA; non-toxic; side effects may include GI irritation or skin sensitivity

1. Industrial Uses

Raw material for soap, detergents, cleaning agents
Used in antifreeze, hydraulic fluids, paints, inks, adhesives, plastics, resins
Found in vaping liquids (vegetable glycerine base)
Used as filling for pressure gauge dampening, stage fog creation, ultrasonic couplant

1. Biochemical & Specialty

Precursor in polyurethane foams, alkyd resins; plasticizer for flexible packaging, cellulose films
Base for small-scale diesel/generator fuels, explosives (nitroglycerin), cryopreservation

鈿欑笉 Manufacturing & Grades

Sources: Derived from fats (animal, vegetable) via saponification or from synthetic/feedstock like propylene

Production volume: ~1.3 million tonnes/year in U.S/EU; surplus from biodiesel
Grades: USP/FCC/Pharma grade (high purity), Food grade, Technical grade

鈔€ Key Benefits & Safety

Advantages: Non 鈥 oxic, biodegradable, multifunctional
Skin & Cosmetic Benefits: Attracts moisture, aids healing, barrier protection
Healthy Food Additive: Sweetens, preserves, stabilizes; no dental plaque growth
Medical Uses: Gentle, effective laxative; suitable for children and adults
Precautions: May cause dehydration if ingested in excess, rare contact dermatitis







- WAX

Wax is a lipid-
like, hydrophobic, solid material that becomes soft and melts at moderate temperatures. It is composed of long-
chain hydrocarbons (alkanes, esters, alcohols, fatty acids) and is used ac ross various industries.

🧪 General Properties of Wax

Property	Description
Texture	Smooth, soft, and pliable when warm
Melting Point	~40°C to 100°C (varies by type)
Solubility	Insoluble in water
Composition	Long-chain hydrocarbons or esters
Color	White, yellow, brown, or clear

课 O Types of Wax and Their Uses

1. Paraffin Wax

课彩 Source: Derived from petroleum
课暯锔€ Uses: Candles, packaging, cosmetics, wax paper, matches
课敝 Melting Point: ~46 鈥€68 掳 C
课彙 Producers: Sasol, ExxonMobil, Iranol, Eastern Petroleum

2. Beeswax

课悵 Source: Honeybees
课 T Uses: Lip balm, salves, candles, polish, food wraps
课鹰 Natural, safe, edible in small amounts

3. Carnauba Wax

锞龙 Source: Leaves of Brazilian palm (Copernicia prunifera)
锞殚 Uses: Car polish, floor wax, cosmetics, candy coating
锞专 High gloss, high melting point (~82 鈥€86 掳C)

4. Candelilla Wax

锞伾 Source: Leaves of the candelilla plant (Mexico)
锞挖 Uses: Lipsticks, creams, vegan cosmetics
Often blended with other waxes

5. Microcrystalline Wax

锞彩 Source: Heavy fractions of petroleum
锞洟锔€ Uses: Rubber, adhesives, chewing gum base, electrical insulation
Sticky and more elastic than paraffin

6. Synthetic Wax

鈿榭笱 Source: Chemically engineered (e.g. Fischer 鈥撉 ropsch process)
锞摝 Uses: Paper coating, plastic additives, hot-melt adhesives

7. Montan Wax

锞弼锔€ Source: Lignite (brown coal)
锞 Ы Uses: Car wax, shoe polish, electrical insulation

🧴 Industrial & Commercial Applications

Industry	Application
Cosmetics	Lipsticks, balms, creams
Pharmaceuticals	Ointment bases, tablet coatings
Food	Fruit coatings, gum base, packaging
Candle-making	Scented, decorative, and utility candles
Automotive	Car polish, rust prevention
Textile & Leather	Waterproofing, finishing
Packaging	Wax-coated paper, boxes

✅ Summary

Wax Type	Best For
Paraffin Wax	Candles, packaging, cosmetics
Beeswax	Skincare, lip balm, candles
Carnauba Wax	Polish, candy coating, cosmetics
Microcrystalline Wax	Rubber, adhesives, chewing gum
Synthetic Wax	Paper coating, hot-melt glue




Paraffin wax

