

## About Us:- (Home Page)

### Welcome to Vayu Naturals!

At Vayu Naturals, we specialize in **Natural Mint Oils and Derivatives**, **Aroma Chemicals**, **Essential Oils**, and **Standardised Botanical Extract**, tailored to meet the needs of the pharmaceutical, cosmetics, and food industries.

We're committed to delivering high-quality, sustainable products that meet rigorous standards of purity and consistency. We focus on providing reliable solutions that add value to your products and processes.

## About Us (Sub Page)

### Welcome to Vayu Naturals!

At Vayu Naturals, we are committed to delivering the finest natural products to the global market. As a vibrant and forward-thinking supplier and exporter of **Natural Mint Oils and Derivatives**, **Aroma Chemicals**, **Essential Oils**, and **Standardised Botanical Extract**, we focus on building lasting partnerships through exceptional quality and service.

### Our Story

Founded with a passion for nature and wellness, Vayu Naturals emerged from believing that the earth's natural resources hold unparalleled potential for enhancing well-being. Our journey began with a commitment to sourcing the purest ingredients directly from nature, ensuring that our product is of the highest quality and efficacy.

### Our Vision and Mission

Our vision is to become a trusted leader in the natural wellness industry, known for our integrity, quality, and dedication to sustainability. We strive to make a positive impact on the lives of our customers by providing products that are not only effective but also ethically sourced and environmentally friendly.

### Quality You Can Trust

Quality is the cornerstone of Vayu Naturals. We carefully select our raw materials from the best sources, ensuring that our essential oils and plant extracts are 100% pure and natural. Our rigorous quality control processes guarantee that each product meets our high standards, free from synthetic additives and contaminants.

### Our Products

Vayu Naturals offers a wide range of products to cater to various needs:

- **Natural Mint Oils and Derivatives.**
- **Aroma Chemicals.**
- **Essential Oils.**
- **Standardised Botanical Extract.**

### **Why Choose Vayu Naturals?**

- **Purity and Quality:** We ensure that our products are of the highest purity and quality.
- **Customer-Centric Approach:** We prioritize our customers' needs and aim to provide exceptional service and support.

### **Join Us on Our Journey**

We invite you to be a part of the Vayu Naturals story. Experience the purity and excellence of our premium **Natural Mint Oils and Derivatives, Aroma Chemicals, Essential Oils,** and **Standardised Botanical Extract**, crafted to bring the best of nature to your business. Thank you for trusting Vayu Naturals as your partner in delivering sustainable and high-quality solutions.

### **Contact Us**

For more information about our products and services, please reach out to us. We look forward to building a healthy and sustainable future together.

---

**Vayu Naturals** – Pure. Natural. Ethical.

## **Product Catalog (Main Page)**

### **Category 1: Natural Mentha Oil and Derivatives**

#### **Natural Crude Mentha Oil and Components**

1. **Natural Crude Mentha Oil**
  - High-grade raw material for menthol production.
2. **Menthol Products:**
  - **Menthol Liquid**
  - **Menthol Powder**
  - **Natural Menthol Crystals**
    - Large Crystals
    - Small Crystals

#### **Menthone Variants**

1. **Menthone 70:30**
2. **Menthone 80:20**
3. **Menthone 90:10**
4. **Menthone 95:5**
5. **ISO Menthone**

#### **Dementholised Oil (DMO)**

1. **Dementholised Oil Crude**

#### **Other Mentha Derivatives**

1. **L-Limonene**
2. **Menthyl Acetate**
3. **Neo Menthol**
4. **Octanol-3**
5. **Alpha Pinene**
6. **Beta Pinene**
7. **Cis-3-Hexenol**
8. **Cis-3-Hexenyl Acetate**

#### **Blended and Specialized Variants**

1. **Peppermint Oil Without Terpene**
  2. **Mint Terpene**
- 

### **Category 2: Essential Oils**

1. **Indian Basil Oil**
    - Natural basil oil, rich in aromatic compounds.
  2. **L-Mentha Citrata Oil**
    - Specialty oil with citrus and minty undertones.
  3. **Palmarosa Oil**
    - Widely used in cosmetics and fragrances.
  4. **Peppermint Oil (BP/USP/EP Grades)**
    - Pharmaceutical-grade oil for diverse applications.
  5. **Spearmint Oil**
    - Milder aroma for flavor and fragrance industries.
  6. **Lemon Grass Oil**
    - Popular in aromatherapy and skincare products.
-

## Category 3: Aroma Chemicals

### Derived from Essential Oils

1. Dihydromyrcenol
2. L-Carvone (Ex. Spearmint Oil)
3. D-Carvone
4. Linalool (Ex. Basil Oil)
5. Anethole
6. Methyl Chavicol

### Specialized Aroma Compounds

1. Menthofuran
2. DHM Tops
3. DHM Bottom

### Crystals

1. Thymol Crystals (U.S.P.)

## Category 4: Organic Certified Products

- Organic Mentha Arvensis Oil
- Organic Menthol Crystal
- Organic Mentha Piperita Oil
- Organic Basil Oil
- Organic Spearmint Oil
- Organic Palmarosa Oil
- Organic Lemon Grass Oil
- Organic Citronella Oil

## Category 5: Standardised Botanical Extract

No.	Botanical Name	Common Name
1	Adhatoda vasica	Vasaka
2	Andrographis paniculata	Kalmegh
3	Asparagus racemosus	Shatavari
4	Asphaltum	Shilajit

5	<i>Azadirachta indica</i>	Neem Leaf
6	<i>Bacopa monnieri</i>	Brahmi (Bacopa)
7	<i>Berberis aristata</i>	Daru Haldi
8	<i>Boerhavia diffusa</i>	Punarnava
9	<i>Boswellia serrata</i>	Boswellia (Indian Frankincense)
10	<i>Boswellia serrata</i>	AKBA (Acetyl-11-Keto-Beta-Boswellic Acid)
11	<i>Carica papaya</i>	Papaya
12	<i>Cissus quadrangularis</i>	Hadjod (Bone Setter)
13	<i>Crataeva nurvala</i>	Varun Chhal (Three-leaved caper)
14	<i>Curcuma longa</i>	Curcumin
15	<i>Cymbopogon flexuosus</i>	Lemongrass
16	<i>Glycyrrhiza glabra</i>	Mulethi (Licorice)
17	<i>Gymnema sylvestre</i>	Gurmar
18	<i>Lagerstroemia speciosa</i>	Banaba Leaf
19	<i>Leptadenia reticulata</i>	Jivanti
20	<i>Momordica charantia</i>	Bitter Melon (Karela)
21	<i>Moringa oleifera</i>	Moringa (Drumstick Tree)
22	<i>Mucuna pruriens</i>	Velvet Bean (Kaunch)
23	<i>Ocimum sanctum</i>	Tulsi (Holy Basil)
24	<i>Picrorhiza kurroa</i>	Kutki
25	<i>Plumbago zeylanica</i>	Chitrakmool (Leadwort)
26	<i>Rauvolfia serpentina</i>	Sarpagandha (Indian Snakeroot)
27	<i>Rubia cordifolia</i>	Manjistha (Indian Madder)
28	<i>Solanum xanthocarpum</i>	Kantkari (Yellow-berried Nightshade)
29	<i>Symplocos racemosa</i>	Lodha
30	<i>Tinospora cordifolia</i>	Giloy (Guduchi)
31	<i>Tribulus terrestris</i>	Gokhru (Puncture Vine)
32	<i>Trigonella foenum-graecum</i>	Fenugreek
33	<i>Vitex negundo</i>	Nirgundi
34	<i>Withania somnifera</i>	Ashwagandha

## Products Details and descriptions:- (Sub Pages)

### ➤ Natural Crude Mentha Oil:-

Natural Crude Mentha Oil, derived from the *Mentha arvensis* plant, is a versatile essential oil with a wide range of applications in various industries.

#### Physical Properties

- **Appearance:** Colorless to pale yellow liquid
- **Odor:** Characteristic, strong, minty aroma
- **Taste:** Cool and refreshing, with a slightly bitter aftertaste
- **Specific Gravity:** 0.890 - 0.905 at 20°C
- **Refractive Index:** 1.458 - 1.462 at 20°C
- **Optical Rotation:** -34° to -36°
- **Solubility:** Soluble in alcohol, slightly soluble in water

#### Chemical Composition

Natural Crude Mentha Oil is a complex mixture of various chemical compounds, primarily dominated by L-menthol. Other key components include:

- **L-Menthol:** The primary constituent, responsible for the characteristic cooling sensation and minty odor.
- **Menthone:** A cyclic ketone contributing to the overall aroma and taste.
- **Isomenthone:** An isomer of menthone, adding to the aromatic profile.
- **Menthyl Acetate:** An ester enhancing the fragrance complexity.
- **Terpenes:** Hydrocarbons contributing to the oil's volatility and aroma.

**Note:** The specific composition of Mentha Oil can vary depending on factors such as plant variety, cultivation conditions, and distillation process.

## ➤ **Menthol Liquid:-**

Menthol liquid is a versatile product derived from natural sources like peppermint or synthetically produced. It's widely used in various applications, including pharmaceuticals, cosmetics, and food and beverage industries.

### **Physical Properties**

- **Appearance:** Clear, colorless to pale yellow liquid
- **Odor:** Strong, characteristic minty odor
- **Taste:** Intensely cooling and minty taste
- **Specific Gravity at 20°C:** Approximately 0.890 - 0.910
- **Refractive Index at 20°C:** Approximately 1.458 - 1.462
- **Optical Rotation at 20°C:** -49° to -50°
- **Solubility:** Soluble in alcohol, ether, chloroform, and fixed oils; slightly soluble in water

### **Chemical Properties**

Menthol liquid primarily consists of L-menthol, a cyclic organic compound with a distinctive cooling sensation. Other potential components may include:

- **D-Menthol:** An isomer of L-menthol
- **Menthone:** A ketone related to menthol
- **Isomenthone:** An isomer of menthone
- **Menthyl Acetate:** An ester of menthol and acetic acid

**Note:** The specific composition of Mentha Liquid can vary depending on factors such as plant variety, cultivation conditions, and distillation process.

## ➤ **Menthol Powder:-**

Menthol powder is a crystalline form of menthol, a naturally occurring organic compound with a strong minty flavor and cooling sensation. It is widely used in various industries, including pharmaceuticals, cosmetics, and food and beverage.

### Physical Properties

- **Appearance:** White, crystalline powder
- **Odor:** Strong, characteristic minty odor
- **Taste:** Intensely cooling and minty taste
- **Melting Point:** Approximately 42-44°C
- **Solubility:** Sparingly soluble in water, soluble in alcohol, ether, and chloroform

### Chemical Properties

- **Molecular Formula:** C<sub>10</sub>H<sub>20</sub>O
- **Molecular Weight:** 156.27 g/mol
- **Chemical Structure:** Cyclic alcohol with a distinctive p-menthane ring structure
- **Optical Activity:** L-Menthol is the most common form, exhibiting optical activity

**Note:** The specific properties and applications of menthol powder may vary depending on its purity and intended use.

## ➤ Natural Menthol Large Crystals:-

Natural Menthol Large Crystals are a high-purity form of menthol, a naturally occurring organic compound with a strong minty flavor and cooling sensation. These crystals are widely used in various industries, including pharmaceuticals, cosmetics, and food and beverage.

### Physical Properties

- **Appearance:** Colorless to white, translucent crystals
- **Odor:** Strong, characteristic minty odor
- **Taste:** Intensely cooling and minty taste
- **Melting Point:** Approximately 42-44°C
- **Solubility:** Sparingly soluble in water, soluble in alcohol, ether, and chloroform

### Chemical Properties



- **Molecular Formula:**  $C_{10}H_{20}O$
- **Molecular Weight:** 156.27 g/mol
- **Chemical Structure:** Cyclic alcohol with a distinctive p-menthane ring structure
- **Optical Activity:** L-Menthol is the most common form, exhibiting optical activity

**Note:**

- Specific quality standards and testing methods may vary depending on the intended use and regulatory requirements of the specific market or region.

## ➤ **Natural Menthol Small Crystals:-**

Natural Menthol Small Crystals are a high-purity form of menthol, a naturally occurring organic compound with a strong minty flavor and cooling sensation. These crystals are widely used in various industries, including pharmaceuticals, cosmetics, and food and beverage.

### **Physical Properties**

- **Appearance:** White, crystalline powder
- **Odor:** Strong, characteristic minty odor
- **Taste:** Intensely cooling and minty taste
- **Melting Point:** Approximately 42-44°C
- **Solubility:** Sparingly soluble in water, soluble in alcohol, ether, and chloroform

### **Chemical Properties**

- **Molecular Formula:**  $C_{10}H_{20}O$
- **Molecular Weight:** 156.27 g/mol
- **Chemical Structure:** Cyclic alcohol with a distinctive p-menthane ring structure
- **Optical Activity:** L-Menthol is the most common form, exhibiting optical activity

**Note:**

- Specific quality standards and testing methods may vary depending on the intended use and regulatory requirements of the specific market or region.

## ➤ **Menthone 70:30:-**

Menthone 70:30 is a mixture of two stereoisomers of menthone: L-menthone and D-isomenthone. It is a versatile ingredient used in various industries, including flavor and fragrance, pharmaceuticals, and cosmetics.

### Physical Properties

- **Appearance:** Colorless to pale yellow liquid
- **Odor:** Strong, minty odor, characteristic of menthol
- **Taste:** Minty, cooling sensation
- **Specific Gravity at 20°C:** Approximately 0.890 - 0.910
- **Refractive Index at 20°C:** Approximately 1.458 - 1.462
- **Optical Rotation at 20°C:** Varies depending on the ratio of L-menthone and D-isomenthone
- **Solubility:** Soluble in alcohol, ether, and chloroform; slightly soluble in water

### Chemical Properties

- **Main Constituents:** L-Menthone and D-Isomenthone
- **Molecular Formula:**  $C_{10}H_{18}O$
- **Molecular Weight:** 154.25 g/mol
- **Chemical Structure:** Cyclic ketone with a distinctive p-menthane ring structure

#### Note:

- Specific quality standards and testing methods may vary depending on the intended use and regulatory requirements of the specific market or region.

## ➤ Menthone 80:20:-

Menthone 80:20 is a mixture of two stereoisomers of menthone: L-menthone and D-isomenthone. It is a versatile ingredient used in various industries, including flavor and fragrance, pharmaceuticals, and cosmetics.

### Physical Properties

- **Appearance:** Colorless to pale yellow liquid
- **Odor:** Strong, minty odor, characteristic of menthol
- **Taste:** Minty, cooling sensation
- **Specific Gravity at 20°C:** Approximately 0.890 - 0.910
- **Refractive Index at 20°C:** Approximately 1.458 - 1.462

- **Optical Rotation at 20°C:** Varies depending on the ratio of L-menthone and D-isomenthone
- **Solubility:** Soluble in alcohol, ether, and chloroform; slightly soluble in water

## Chemical Properties

- **Main Constituents:** L-Menthone and D-Isomenthone
- **Molecular Formula:**  $C_{10}H_{18}O$
- **Molecular Weight:** 154.25 g/mol
- **Chemical Structure:** Cyclic ketone with a distinctive p-menthane ring structure

### Note:

- Specific quality standards and testing methods may vary depending on the intended use and regulatory requirements of the specific market or region.

## ➤ Menthone 90:10:-

Menthone 90:10 is a mixture of two stereoisomers of menthone: L-menthone and D-isomenthone. It is a versatile ingredient used in various industries, including flavor and fragrance, pharmaceuticals, and cosmetics.

## Physical Properties

- **Appearance:** Colorless to pale yellow liquid
- **Odor:** Strong, minty odor, characteristic of menthol
- **Taste:** Minty, cooling sensation
- **Specific Gravity at 20°C:** Approximately 0.890 - 0.910
- **Refractive Index at 20°C:** Approximately 1.458 - 1.462
- **Optical Rotation at 20°C:** Varies depending on the ratio of L-menthone and D-isomenthone
- **Solubility:** Soluble in alcohol, ether, and chloroform; slightly soluble in water

## Chemical Properties

- **Main Constituents:** L-Menthone and D-Isomenthone
- **Molecular Formula:**  $C_{10}H_{18}O$
- **Molecular Weight:** 154.25 g/mol
- **Chemical Structure:** Cyclic ketone with a distinctive p-menthane ring structure

### Note:

- Specific quality standards and testing methods may vary depending on the intended use and regulatory requirements of the specific market or region.

## Menthone 95:5:-

Menthone 95:5 is a mixture of two stereoisomers of menthone: L-menthone and D-isomenthone. It is a versatile ingredient used in various industries, including flavor and fragrance, pharmaceuticals, and cosmetics.

### Physical Properties

- **Appearance:** Colorless to pale yellow liquid
- **Odor:** Strong, minty odor, characteristic of menthol
- **Taste:** Minty, cooling sensation
- **Specific Gravity at 20°C:** Approximately 0.890 - 0.910
- **Refractive Index at 20°C:** Approximately 1.458 - 1.462
- **Optical Rotation at 20°C:** Varies depending on the ratio of L-menthone and D-isomenthone
- **Solubility:** Soluble in alcohol, ether, and chloroform; slightly soluble in water

### Chemical Properties

- **Main Constituents:** L-Menthone and D-Isomenthone
- **Molecular Formula:**  $C_{10}H_{18}O$
- **Molecular Weight:** 154.25 g/mol
- **Chemical Structure:** Cyclic ketone with a distinctive p-menthane ring structure

#### Note:

- Specific quality standards and testing methods may vary depending on the intended use and regulatory requirements of the specific market or region.

## ISO Menthone:-

ISO Menthone, also known as D-Isomenthone, is a cyclic ketone derived from natural sources like peppermint oil or synthesized through various chemical processes. It is widely used in the flavor and fragrance industry, as well as in certain pharmaceutical and cosmetic applications.

## Physical Properties

- **Appearance:** Colorless to pale yellow liquid
- **Odor:** Strong, minty odor, characteristic of menthol
- **Taste:** Minty, cooling sensation
- **Specific Gravity at 20°C:** Approximately 0.890 - 0.910
- **Refractive Index at 20°C:** Approximately 1.458 - 1.462
- **Optical Rotation at 20°C:** Positive value, indicating its D-configuration
- **Solubility:** Soluble in alcohol, ether, and chloroform; slightly soluble in water

## Chemical Properties

- **Molecular Formula:**  $C_{10}H_{18}O$
- **Molecular Weight:** 154.25 g/mol
- **Chemical Structure:** Cyclic ketone with a distinctive p-menthane ring structure.

### Note:

- Specific quality standards and testing methods may vary depending on the intended use and regulatory requirements of the specific market or region.

## ➤ Dementholised Oil Crude:-

Dementholised Oil Crude, often referred to as "dementholized peppermint oil," is a byproduct obtained during the process of menthol extraction from peppermint oil. It is a complex mixture of various terpenes and terpenoids, primarily consisting of menthone, isomenthone, and other minor components.

## Physical Properties

- **Appearance:** Colorless to pale yellow liquid
- **Odor:** Strong, minty odor, but less intense than peppermint oil
- **Taste:** Minty, but less intense than peppermint oil
- **Specific Gravity at 20°C:** Approximately 0.890 - 0.910
- **Refractive Index at 20°C:** Approximately 1.458 - 1.462
- **Optical Rotation at 20°C:** Varies depending on the specific composition
- **Solubility:** Soluble in alcohol, ether, and chloroform; slightly soluble in water

## Chemical Composition

- **Menthone:** Major component
- **Isomenthone:** Significant component
- **Other Terpenes and Terpenoids:** Minor components, including pulegone, piperitone, and limonene

**Note:**

- Specific quality standards and testing methods may vary depending on the intended use and regulatory requirements of the specific market or region.

## ➤ **L-Limonene:-**

L-Limonene is a naturally occurring organic compound that belongs to the terpene class. It is a colorless liquid with a strong citrus scent, primarily extracted from citrus fruits like oranges and lemons. L-Limonene is widely used in the food, beverage, pharmaceutical, and cosmetic industries.

### **Physical Properties**

- **Appearance:** Colorless liquid
- **Odor:** Strong, citrus-like odor
- **Taste:** Citrus-like flavor
- **Specific Gravity at 20°C:** Approximately 0.841 - 0.846
- **Refractive Index at 20°C:** Approximately 1.476 - 1.478
- **Optical Rotation at 20°C:** +97° to +103°
- **Solubility:** Slightly soluble in water, soluble in alcohol, ether, and chloroform

### **Chemical Properties**

- **Molecular Formula:** C<sub>10</sub>H<sub>16</sub>
- **Molecular Weight:** 136.24 g/mol
- **Chemical Structure:** Cyclic hydrocarbon with a distinctive monoterpene structure

**Note:**

- Specific quality standards and testing methods may vary depending on the intended use and regulatory requirements of the specific market or region.

## ➤ **Menthyl Acetate:-**

Menthyl acetate is an organic compound derived from menthol and acetic acid. It is a colorless liquid with a strong, sweet, minty odor. It is widely used in the flavor and fragrance industry, as well as in certain pharmaceutical and cosmetic applications.

### Physical Properties

- **Appearance:** Colorless liquid
- **Odor:** Strong, sweet, minty odor
- **Taste:** Minty, refreshing taste
- **Specific Gravity at 20°C:** Approximately 0.900 - 0.910
- **Refractive Index at 20°C:** Approximately 1.450 - 1.460
- **Boiling Point:** Approximately 226-228°C
- **Solubility:** Slightly soluble in water, soluble in alcohol, ether, and chloroform

### Chemical Properties

- **Molecular Formula:**  $C_{12}H_{22}O_2$
- **Molecular Weight:** 198.30 g/mol
- **Chemical Structure:** Ester of menthol and acetic acid

#### Note:

- Specific quality standards and testing methods may vary depending on the intended use and regulatory requirements of the specific market or region.

### ➤ Neo Menthol:-

Neo Menthol, also known as Neomenthol, is a synthetic compound with a similar chemical structure to natural menthol. It possesses a strong minty odor and cooling sensation, making it a valuable ingredient in various industries, including pharmaceuticals, cosmetics, and food and beverage.

### Physical Properties

- **Appearance:** Colorless to pale yellow liquid
- **Odor:** Strong, minty odor, similar to natural menthol
- **Taste:** Intensely cooling and minty taste
- **Specific Gravity at 20°C:** Approximately 0.890 - 0.910
- **Refractive Index at 20°C:** Approximately 1.458 - 1.462

- **Boiling Point:** Approximately 216-218°C
- **Solubility:** Slightly soluble in water, soluble in alcohol, ether, and chloroform

### Chemical Properties

- **Molecular Formula:**  $C_{10}H_{20}O$
- **Molecular Weight:** 156.27 g/mol
- **Chemical Structure:** Cyclic alcohol with a distinctive p-menthane ring structure, similar to natural menthol, but with a different stereochemistry

#### Note:

- Specific quality standards and testing methods may vary depending on the intended use and regulatory requirements of the specific market or region.

## ➤ Octanol-3:-

Octanol-3, also known as 3-octanol, is an organic compound belonging to the alcohol family. It is a colorless liquid with a faint, sweet odor. Octanol-3 is used in various applications, including as a solvent, fragrance ingredient, and intermediate in chemical synthesis.

### Physical Properties

- **Appearance:** Colorless liquid
- **Odor:** Faint, sweet odor
- **Taste:** Mild, slightly sweet taste
- **Specific Gravity at 20°C:** Approximately 0.825
- **Refractive Index at 20°C:** Approximately 1.430
- **Boiling Point:** Approximately 195-198°C
- **Solubility:** Slightly soluble in water, soluble in alcohol, ether, and chloroform

### Chemical Properties

- **Molecular Formula:**  $C_8H_{18}O$
- **Molecular Weight:** 130.23 g/mol
- **Chemical Structure:** Straight-chain alcohol with a hydroxyl group on the third carbon atom

#### Note:



- Specific quality standards and testing methods may vary depending on the intended use and regulatory requirements of the specific market or region.

### ➤ **Alpha-Pinene:-**

Alpha-Pinene is a naturally occurring monoterpene hydrocarbon found in many essential oils, particularly those derived from coniferous trees like pine and fir. It is a colorless liquid with a strong, pine-like odor. Alpha-Pinene is widely used in the fragrance, flavor, and pharmaceutical industries.

#### **Physical Properties**

- **Appearance:** Colorless liquid
- **Odor:** Strong, pine-like odor
- **Taste:** Pungent, slightly bitter taste
- **Specific Gravity at 20°C:** Approximately 0.858 - 0.865
- **Refractive Index at 20°C:** Approximately 1.466 - 1.470
- **Boiling Point:** Approximately 155-156°C
- **Solubility:** Insoluble in water, soluble in alcohol, ether, and chloroform

#### **Chemical Properties**

- **Molecular Formula:**  $C_{10}H_{16}$
- **Molecular Weight:** 136.24 g/mol
- **Chemical Structure:** Cyclic hydrocarbon with a bicyclic structure

#### **Note:**

- Specific quality standards and testing methods may vary depending on the intended use and regulatory requirements of the specific market or region.

### ➤ **Beta-Pinene:-**

Beta-Pinene is a naturally occurring monoterpene hydrocarbon found in many essential oils, particularly those derived from coniferous trees like

pine and fir. It is a colorless liquid with a strong, pine-like odor. Beta-Pinene is widely used in the fragrance, flavor, and pharmaceutical industries.

### Physical Properties

- **Appearance:** Colorless liquid
- **Odor:** Strong, pine-like odor
- **Taste:** Pungent, slightly bitter taste
- **Specific Gravity at 20°C:** Approximately 0.860 - 0.865
- **Refractive Index at 20°C:** Approximately 1.477 - 1.480
- **Boiling Point:** Approximately 163-164°C
- **Solubility:** Insoluble in water, soluble in alcohol, ether, and chloroform

### Chemical Properties

- **Molecular Formula:**  $C_{10}H_{16}$
- **Molecular Weight:** 136.24 g/mol
- **Chemical Structure:** Cyclic hydrocarbon with a bicyclic structure

#### Note:

- Specific quality standards and testing methods may vary depending on the intended use and regulatory requirements of the specific market or region.

### ➤ Cis-3-Hexenol:-

Cis-3-Hexenol is a naturally occurring organic compound that belongs to the class of aliphatic alcohols. It is a colorless liquid with a strong, green, leafy odor, often described as a "fresh-cut grass" scent. Cis-3-Hexenol is widely used in the flavor and fragrance industry as a key component in various green and herbal fragrances.

### Physical Properties

- **Appearance:** Colorless liquid
- **Odor:** Strong, green, leafy odor
- **Taste:** Green, leafy taste
- **Specific Gravity at 20°C:** Approximately 0.830 - 0.840
- **Refractive Index at 20°C:** Approximately 1.435 - 1.440

- **Boiling Point:** Approximately 152-155°C
- **Solubility:** Slightly soluble in water, soluble in alcohol, ether, and chloroform

### Chemical Properties

- **Molecular Formula:**  $C_6H_{12}O$
- **Molecular Weight:** 100.16 g/mol
- **Chemical Structure:** Acyclic alcohol with a cis double bond at the 3-position

#### Note:

- Specific quality standards and testing methods may vary depending on the intended use and regulatory requirements of the specific market or region.

## ➤ Cis-3-Hexenyl Acetate:-

Cis-3-Hexenyl acetate is an organic compound that belongs to the ester family. It is a colorless liquid with a strong, green, leafy odor, often described as a "fresh-cut grass" scent. Cis-3-Hexenyl acetate is widely used in the flavor and fragrance industry as a key component in various green and herbal fragrances.

### Physical Properties

- **Appearance:** Colorless liquid
- **Odor:** Strong, green, leafy odor
- **Taste:** Green, leafy taste
- **Specific Gravity at 20°C:** Approximately 0.880 - 0.890
- **Refractive Index at 20°C:** Approximately 1.435 - 1.440
- **Boiling Point:** Approximately 170-175°C
- **Solubility:** Slightly soluble in water, soluble in alcohol, ether, and chloroform

### Chemical Properties

- **Molecular Formula:**  $C_8H_{14}O_2$
- **Molecular Weight:** 142.20 g/mol
- **Chemical Structure:** Ester derived from cis-3-hexenol and acetic acid

#### Note:

- Specific quality standards and testing methods may vary depending on the intended use and regulatory requirements of the specific market or region.

## ➤ **Peppermint Oil Without Terpene:-**

Peppermint Oil Without Terpene is a refined form of peppermint oil that has undergone a process to remove or significantly reduce its terpene content. Terpenes are volatile organic compounds that contribute to the strong, distinctive odor of peppermint oil. By removing these terpenes, the resulting product has a milder aroma and is often used in applications where a less intense flavor is desired.

### **Physical Properties**

- **Appearance:** Colorless to pale yellow liquid
- **Odor:** Milder peppermint odor compared to regular peppermint oil
- **Taste:** Milder peppermint taste
- **Specific Gravity at 20°C:** Approximately 0.900 - 0.910
- **Refractive Index at 20°C:** Approximately 1.458 - 1.462
- **Solubility:** Slightly soluble in water, soluble in alcohol, ether, and chloroform

### **Chemical Composition**

- **Menthol:** Primary constituent, responsible for the cooling sensation and minty flavor
- **Menthone:** Secondary constituent, contributing to the overall flavor profile
- **Other Minor Components:** Reduced levels of terpenes, such as menthol esters and pulegone

#### **Note:**

- Specific quality standards and testing methods may vary depending on the intended use and regulatory requirements of the specific market or region.

## ➤ **Mint Terpene:-**

Mint Terpene is a complex mixture of various terpenes and terpenoids extracted from peppermint oil. It is a colorless to pale yellow liquid with a strong, characteristic minty odor. Mint Terpene is widely used in the flavor and fragrance industry as a key ingredient in various mint-flavored products.

### Physical Properties

- **Appearance:** Colorless to pale yellow liquid
- **Odor:** Strong, characteristic minty odor
- **Taste:** Minty, cooling taste
- **Specific Gravity at 20°C:** Approximately 0.890 - 0.910
- **Refractive Index at 20°C:** Approximately 1.458 - 1.462
- **Solubility:** Slightly soluble in water, soluble in alcohol, ether, and chloroform

### Chemical Composition

Mint Terpene is a complex mixture containing various terpenes and terpenoids, including:

- **Menthol:** A major component, responsible for the cooling sensation and minty flavor
- **Menthone:** Another significant component, contributing to the overall minty aroma
- **Menthyl Acetate:** An ester that adds to the complexity of the fragrance
- **Other Terpenes:** Such as pulegone, piperitone, and limonene

#### Note:

- Specific quality standards and testing methods may vary depending on the intended use and regulatory requirements of the specific market or region.

### ➤ Indian Basil Oil:-

Indian Basil Oil, derived from the leaves of the *Ocimum sanctum* plant, commonly known as Tulsi or Holy Basil, is a revered herb in Ayurvedic medicine. This aromatic oil is renowned for its diverse therapeutic properties and is widely used in various applications, including aromatherapy, skincare, and traditional medicine.

#### Physical Properties:

- **Appearance:** Pale yellow to light brown liquid
- **Odor:** Strong, aromatic, herbaceous odor, reminiscent of camphor and clove
- **Taste:** Pungent, slightly bitter taste
- **Specific Gravity:** 0.950 - 0.970 at 25°C

- **Optical Rotation:**  $-10^{\circ}$  to  $-20^{\circ}$
- **Refractive Index:** 1.5150 - 1.5250 at  $20^{\circ}\text{C}$

#### **Chemical Composition:**

The chemical composition of Indian Basil Oil is complex and varies depending on factors such as the plant variety, geographical origin, and harvesting time. However, the primary constituents typically include:

- **Eugenol:** A potent antioxidant and antimicrobial compound, contributing to the oil's medicinal properties.
- **Methyl Chavicol:** A fragrant compound responsible for the oil's characteristic aroma.
- **Cineole:** A compound with expectorant and decongestant properties.
- **Linalool:** A calming and relaxing compound.
- **Terpinene-4-ol:** An antioxidant and antimicrobial compound.

**Note:** The Specific quality standards and testing methods may vary depending on the specific market or region's intended use and regulatory requirements.

### ➤ **L-Mentha Citrata Oil:-**

L-Mentha Citrata Oil, commonly known as Spearmint Oil, is an essential oil extracted from the leaves and flowering tops of the Mentha citrata plant. This aromatic oil is widely used in various industries, including food and beverage, cosmetics, pharmaceuticals, and aromatherapy. It is prized for its refreshing, minty fragrance and its diverse therapeutic properties.

#### **Physical and Chemical Properties**

##### **Physical Properties:**

- **Appearance:** Colorless to pale yellow liquid
- **Odor:** Strong, characteristic, minty odor
- **Taste:** Pungent, minty taste
- **Specific Gravity:** 0.900 - 0.920 at  $25^{\circ}\text{C}$
- **Optical Rotation:**  $-20^{\circ}$  to  $-30^{\circ}$
- **Refractive Index:** 1.4580 - 1.4620 at  $20^{\circ}\text{C}$

##### **Chemical Composition:**

The primary constituents of L-Mentha Citrata Oil are:

- **L-Carvone:** A major component responsible for the oil's characteristic minty flavor and aroma.
- **L-Limonene:** A fragrant compound with citrusy notes.

- **L-Menthol:** A cooling and refreshing compound, although present in lower amounts than in peppermint oil.
- **β-Pinene:** A terpene with antimicrobial properties.

**Note:** The Specific quality standards and testing methods may vary depending on the specific market or region's intended use and regulatory requirements.

### ➤ **Palmarosa Oil:-**

Palmarosa Oil, extracted from the *Cymbopogon martinii* var. *motia* plant, is a valuable essential oil widely used in the perfume, cosmetics, and aromatherapy industries. It is prized for its floral, rosy fragrance and its potential therapeutic properties.

#### **Physical Properties:**

- **Appearance:** Colorless to pale yellow liquid
- **Odor:** Strong, floral, rosy odor
- **Taste:** Pungent, herbaceous taste
- **Specific Gravity:** 0.885 - 0.905 at 25°C
- **Optical Rotation:** +1° to +3°
- **Refractive Index:** 1.4650 - 1.4700 at 20°C

#### **Chemical Composition:**

The primary constituents of Palmarosa Oil are:

- **Geraniol:** A major component responsible for the oil's floral, rosy fragrance.
- **Geranyl Acetate:** A fragrant ester contributing to the oil's sweet, fruity notes.
- **Citral:** A compound with lemony and citrusy notes.
- **Myrcene:** A terpene with a warm, spicy aroma.

**Note:** The Specific quality standards and testing methods may vary depending on the specific market or region's intended use and regulatory requirements.

### ➤ **Peppermint Oil (BP/USP/EP Grades):-**

Peppermint Oil, derived from the leaves and flowering tops of the *Mentha piperita* plant, is a versatile essential oil widely used in various industries, including food and beverage, cosmetics, pharmaceuticals, and aromatherapy. It is prized for its refreshing, minty flavor and aroma, as well as its potential therapeutic properties.

#### **Physical Properties:**

- **Appearance:** Colorless to pale yellow liquid
- **Odor:** Strong, characteristic, minty odor
- **Taste:** Pungent, minty taste
- **Specific Gravity:** 0.890 - 0.910 at 25°C
- **Optical Rotation:** -20° to -30°
- **Refractive Index:** 1.4820 - 1.4860 at 20°C

#### **Chemical Composition:**

The primary constituents of Peppermint Oil are:

- **Menthol:** A major component responsible for the oil's cooling and refreshing properties.
- **Menthone:** A compound contributing to the oil's minty flavor.
- **Menthyl Acetate:** A fragrant ester adding to the oil's sweetness.
- **1,8-Cineole:** A compound with expectorant and decongestant properties.

**Note:** The Specific quality standards and testing methods may vary depending on the specific market or region's intended use and regulatory requirements.

### ➤ **Spearmint Oil:-**

Spearmint Oil, derived from the leaves and flowering tops of the *Mentha spicata* plant, is a versatile essential oil widely used in various industries, including food and beverage, cosmetics, pharmaceuticals, and aromatherapy. It is prized for its refreshing, minty flavor and aroma, as well as its potential therapeutic properties.

#### **Physical and Chemical Properties**

##### **Physical Properties:**

- **Appearance:** Colorless to pale yellow liquid
- **Odor:** Strong, characteristic, minty odor
- **Taste:** Pungent, minty taste
- **Specific Gravity:** 0.900 - 0.920 at 25°C
- **Optical Rotation:** -20° to -30°
- **Refractive Index:** 1.4580 - 1.4620 at 20°C

##### **Chemical Composition:**

The primary constituents of Spearmint Oil are:

- **L-Carvone:** A major component responsible for the oil's characteristic minty flavor and aroma.
- **L-Limonene:** A fragrant compound with citrusy notes.



- **L-Menthol:** A cooling and refreshing compound, although present in lower amounts than in peppermint oil.
- **$\beta$ -Pinene:** A terpene with antimicrobial properties.

**Note:** The Specific quality standards and testing methods may vary depending on the specific market or region's intended use and regulatory requirements.

## ➤ **Lemon Grass Oil:-**

Lemon Grass Oil, derived from the *Cymbopogon citratus* plant, is a versatile essential oil widely used in various industries, including food and beverage, cosmetics, pharmaceuticals, and aromatherapy. It is prized for its refreshing, lemony fragrance and its potential therapeutic properties.

### **Physical and Chemical Properties**

#### **Physical Properties:**

- **Appearance:** Pale yellow to light brown liquid
- **Odor:** Strong, lemony, herbaceous odor
- **Taste:** Pungent, citrusy taste
- **Specific Gravity:** 0.880 - 0.900 at 25°C
- **Optical Rotation:** -0.3° to +0.3°
- **Refractive Index:** 1.4820 - 1.4860 at 20°C

#### **Chemical Composition:**

The primary constituents of Lemon Grass Oil are:

- **Citral:** A major component responsible for the oil's lemony fragrance. It is a mixture of geranial and neral.
- **Myrcene:** A terpene with a warm, spicy aroma.
- **Geraniol:** A fragrant alcohol contributing to the oil's floral notes.
- **$\beta$ -Pinene:** A terpene with antimicrobial properties.

**Note:** The Specific quality standards and testing methods may vary depending on the specific market or region's intended use and regulatory requirements.

## ➤ **Dihydromyrcenol:-**

Dihydromyrcenol is a versatile synthetic fragrance compound widely used in the perfume and flavor industry. It possesses a fresh, citrusy, and slightly floral aroma, making it a popular choice for creating a variety of fragrance compositions.

#### Physical Properties:

- **Appearance:** Colorless liquid
- **Odor:** Fresh, citrusy, floral
- **Specific Gravity:** Approximately 0.83 g/cm<sup>3</sup> at 25°C
- **Boiling Point:** Approximately 194-197°C
- **Refractive Index:** Approximately 1.443 at 20°C
- **Flash Point:** Approximately 76°C

#### Chemical Properties:

- **Molecular Formula:** C<sub>10</sub>H<sub>20</sub>O
- **Molecular Weight:** 156.27 g/mol
- **CAS Number:** 18479-58-8
- **Solubility:** Soluble in alcohol, ether, and other organic solvents; slightly soluble in water.
- **Stability:** Stable under normal storage conditions, but may decompose under exposure to light, heat, or air.

**Note:** The Specific quality standards and testing methods may vary depending on the specific market or region's intended use and regulatory requirements.

## ➤ L-Carvone (Ex. Spearmint Oil):-

L-Carvone is a chiral organic compound that is a major constituent of many essential oils, particularly spearmint oil. It is a versatile compound with a strong, characteristic minty odor. L-Carvone is widely used in the flavor and fragrance industry, as well as in pharmaceutical and food applications.

#### Physical Properties:

- **Appearance:** Colorless to pale yellow liquid
- **Odor:** Strong, minty odor
- **Specific Gravity:** Approximately 0.960 g/cm<sup>3</sup> at 25°C
- **Boiling Point:** Approximately 230°C
- **Refractive Index:** Approximately 1.499 at 20°C
- **Optical Rotation:** Approximately +60° to +62°

#### Chemical Properties:

- **Molecular Formula:**  $C_{10}H_{14}O$
- **Molecular Weight:** 150.22 g/mol
- **CAS Number:** 6485-40-1
- **Solubility:** Soluble in alcohol, ether, and other organic solvents; slightly soluble in water.
- **Stability:** Stable under normal storage conditions, but may decompose under exposure to light, heat, or air.

**Note:** The Specific quality standards and testing methods may vary depending on the specific market or region's intended use and regulatory requirements.

## ➤ **D-Carvone:-**

D-Carvone is a chiral organic compound that is a major constituent of many essential oils, particularly caraway seed oil and dill weed oil. It is a versatile compound with a strong, characteristic caraway-like odor. D-Carvone is widely used in the flavor and fragrance industry, as well as in pharmaceutical and food applications.

### **Physical Properties:**

- **Appearance:** Colorless to pale yellow liquid
- **Odor:** Strong, caraway-like odor
- **Specific Gravity:** Approximately 0.960 g/cm<sup>3</sup> at 25°C
- **Boiling Point:** Approximately 227-230°C
- **Refractive Index:** Approximately 1.499 at 20°C
- **Optical Rotation:** Approximately -60° to -62°

### **Chemical Properties:**

- **Molecular Formula:**  $C_{10}H_{14}O$
- **Molecular Weight:** 150.22 g/mol
- **CAS Number:** 6485-41-2
- **Solubility:** Soluble in alcohol, ether, and other organic solvents; slightly soluble in water.
- **Stability:** Stable under normal storage conditions, but may decompose under exposure to light, heat, or air.

**Note:** The Specific quality standards and testing methods may vary depending on the specific market or region's intended use and regulatory requirements.

## ➤ **Linalool (Ex. Basil Oil):-**

Linalool is a naturally occurring monoterpene alcohol found in many essential oils, including basil oil, lavender oil, and coriander oil. It is a versatile compound with a floral, sweet, and slightly spicy aroma. Linalool is widely used in the flavor and fragrance industry, as well as in pharmaceutical and cosmetic applications.

#### **Physical Properties:**

- **Appearance:** Colorless liquid
- **Odor:** Floral, sweet, slightly spicy
- **Specific Gravity:** Approximately 0.865 g/cm<sup>3</sup> at 25°C
- **Boiling Point:** Approximately 198-199°C
- **Refractive Index:** Approximately 1.462-1.464 at 20°C
- **Optical Rotation:** Varies depending on the source and purity of the linalool. Natural linalool can be either dextrorotatory or levorotatory.

#### **Chemical Properties:**

- **Molecular Formula:** C<sub>10</sub>H<sub>18</sub>O
- **Molecular Weight:** 154.25 g/mol
- **CAS Number:** 78-70-6
- **Solubility:** Soluble in alcohol, ether, and other organic solvents; slightly soluble in water.
- **Stability:** Stable under normal storage conditions, but may decompose under exposure to light, heat, or air.

**Note:** The Specific quality standards and testing methods may vary depending on the specific market or region's intended use and regulatory requirements.

### ➤ **Anethole:-**

Anethole is a naturally occurring phenylpropene, primarily found in essential oils of anise, fennel, and star anise. It is a colorless, crystalline compound with a distinct sweet, licorice-like aroma. Anethole is widely used in the flavor and fragrance industry, as well as in pharmaceutical and food applications.

#### **Physical Properties:**

- **Appearance:** Colorless crystals or liquid
- **Odor:** Sweet, anise-like
- **Melting Point:** 21-23°C
- **Boiling Point:** 233-235°C
- **Specific Gravity:** 0.988 g/cm<sup>3</sup> at 20°C
- **Refractive Index:** 1.560 at 20°C

### Chemical Properties:

- **Molecular Formula:**  $C_{10}H_{12}O$
- **Molecular Weight:** 148.21 g/mol
- **CAS Number:** 104-46-1
- **Solubility:** Soluble in alcohol, ether, and other organic solvents; slightly soluble in water.
- **Stability:** Stable under normal storage conditions, but may decompose under exposure to light, heat, or air.

**Note:** The Specific quality standards and testing methods may vary depending on the specific market or region's intended use and regulatory requirements.

## ➤ Methyl Chavicol:-

Methyl chavicol, also known as estragole, is a naturally occurring phenylpropene compound found in various essential oils, including basil, tarragon, and fennel. It is a colorless liquid with a sweet, anise-like odor. Methyl chavicol is widely used in the flavor and fragrance industry, as well as in pharmaceutical and food applications.

### Physical Properties:

- **Appearance:** Colorless liquid
- **Odor:** Sweet, anise-like
- **Specific Gravity:** Approximately 0.971 g/cm<sup>3</sup> at 20°C
- **Boiling Point:** Approximately 233-235°C
- **Refractive Index:** Approximately 1.523 at 20°C

### Chemical Properties:

- **Molecular Formula:**  $C_{10}H_{12}O$
- **Molecular Weight:** 148.21 g/mol
- **CAS Number:** 140-67-0
- **Solubility:** Soluble in alcohol, ether, and other organic solvents; slightly soluble in water.
- **Stability:** Stable under normal storage conditions, but may decompose under exposure to light, heat, or air.

**Note:** The Specific quality standards and testing methods may vary depending on the specific market or region's intended use and regulatory requirements.

## ➤ Menthofuran:-

Menthofuran is a naturally occurring monoterpene found in many essential oils, particularly peppermint oil. It is a colorless liquid with a strong, minty odor. Menthofuran is widely used in the flavor and fragrance industry, as well as in pharmaceutical and food applications.

### Physical and Chemical Properties

#### Physical Properties:

- **Appearance:** Colorless liquid
- **Odor:** Strong, minty
- **Specific Gravity:** Approximately 0.920 g/cm<sup>3</sup> at 20°C
- **Boiling Point:** Approximately 210-212°C
- **Refractive Index:** Approximately 1.482 at 20°C

#### Chemical Properties:

- **Molecular Formula:** C<sub>10</sub>H<sub>14</sub>O
- **Molecular Weight:** 150.22 g/mol
- **CAS Number:** 497-34-8
- **Solubility:** Soluble in alcohol, ether, and other organic solvents; slightly soluble in water.
- **Stability:** Stable under normal storage conditions, but may decompose under exposure to light, heat, or air.

**Note:** The Specific quality standards and testing methods may vary depending on the specific market or region's intended use and regulatory requirements.

### ➤ DHM Tops:-

DHM Tops, short for Dihydromyrcenol Tops, is a valuable chemical intermediate derived from the terpene myrcene. It is a colorless liquid with a fresh, citrusy, and slightly floral aroma. DHM Tops is widely used in the fragrance and flavor industry as a key ingredient in various fragrance compositions.

### Physical and Chemical Properties

#### Physical Properties:

- **Appearance:** Colorless liquid
- **Odor:** Fresh, citrusy, floral
- **Specific Gravity:** Approximately 0.83 g/cm<sup>3</sup> at 25°C
- **Boiling Point:** Approximately 194-197°C
- **Refractive Index:** Approximately 1.443 at 20°C
- **Flash Point:** Approximately 76°C

### Chemical Properties:

- **Molecular Formula:** C<sub>10</sub>H<sub>20</sub>O
- **Molecular Weight:** 156.27 g/mol
- **CAS Number:** 18479-58-8
- **Solubility:** Soluble in alcohol, ether, and other organic solvents; slightly soluble in water.
- **Stability:** Stable under normal storage conditions, but may decompose under exposure to light, heat, or air.

**Note:** The Specific quality standards and testing methods may vary depending on the specific market or region's intended use and regulatory requirements.

### ➤ DHM Bottom:-

DHM Bottom, short for Dihydromyrcenol Bottom, is a valuable chemical intermediate derived from the terpene myrcene. It is a colorless liquid with a fresh, citrusy, and slightly floral aroma. DHM Bottom is widely used in the fragrance and flavor industry as a key ingredient in various fragrance compositions.

### Physical Properties:

- **Appearance:** Colorless liquid
- **Odor:** Fresh, citrusy, floral
- **Specific Gravity:** Approximately 0.83 g/cm<sup>3</sup> at 25°C
- **Boiling Point:** Approximately 194-197°C
- **Refractive Index:** Approximately 1.443 at 20°C
- **Flash Point:** Approximately 76°C

### Chemical Properties:

- **Molecular Formula:** C<sub>10</sub>H<sub>20</sub>O
- **Molecular Weight:** 156.27 g/mol
- **CAS Number:** 18479-58-8
- **Solubility:** Soluble in alcohol, ether, and other organic solvents; slightly soluble in water.
- **Stability:** Stable under normal storage conditions, but may decompose under exposure to light, heat, or air.

**Note:** The Specific quality standards and testing methods may vary depending on the specific market or region's intended use and regulatory requirements.

## ➤ Thymol Crystals (U.S.P.):-

Thymol is a naturally occurring monoterpene phenol found in various essential oils, primarily thyme oil. It is a white crystalline solid with a strong, aromatic odor. Thymol has a wide range of applications, including as an antiseptic, antifungal, and antimicrobial agent. It is also used as a flavoring agent in food and beverages.

### Physical and Chemical Properties

#### Physical Properties:

- **Appearance:** White crystals or crystalline powder
- **Odor:** Strong, aromatic, thyme-like
- **Melting Point:** Approximately 51-52°C
- **Boiling Point:** Approximately 232°C
- **Specific Gravity:** Approximately 1.028 g/cm<sup>3</sup> at 25°C
- **Solubility:** Slightly soluble in water; soluble in alcohol, ether, and chloroform.

#### Chemical Properties:

- **Molecular Formula:** C<sub>10</sub>H<sub>14</sub>O
- **Molecular Weight:** 150.22 g/mol
- **CAS Number:** 89-83-8
- **Stability:** Stable under normal storage conditions, but may decompose under exposure to light, heat, or air.

**Note:** The Specific quality standards and testing methods may vary depending on the specific market or region's intended use and regulatory requirements.

## Here's the expanded description for each extract:

---

### 1. Kalmegh (Andrographis Paniculata)

Kalmegh extract is sourced from the whole plant and is known for its potent immunomodulatory, hepatoprotective, and anti-inflammatory properties. It is highly valued in traditional medicine for treating liver disorders, boosting immunity, and fighting infections. Kalmegh is also effective in managing fever, colds, and respiratory infections. Its active compound, andrographolide, has been studied for its potential antiviral properties. The extract is widely used in herbal and pharmaceutical formulations.



- **Botanical Name:** Andrographis Paniculata
  - **Other Names:** Kalmegha (Sanskrit), Kalmegh (Hindi), Kalupnath (Chinese), Kirayat (Hindi), Mahatita (King of Bitters), Alui
  - **Plant Part Used:** Whole plant
  - **Active Ingredient:** Andrographolide
  - **CAS No.:** 5508-58-7
  - **Appearance:** Light greenish to yellowish powder with a bitter taste.
  - **Uses:** Kalmegh is used for liver problems, fever, and as an anti-inflammatory. It also has immunostimulant properties, especially for upper respiratory tract infections. Clinical trials suggest it may be effective for HIV infections.
  - **Possible Combinations:** Can be combined with tulsi, neem, trikatu, and triphala as an analgesic, and with punarnava as a hepatoprotective.
- 

## 2. Shatavari (Asparagus Racemosus)

Shatavari extract is derived from the roots of the plant and is revered for its adaptogenic and rejuvenating properties. It is especially beneficial for women's health, supporting hormonal balance, reproductive health, and lactation. Shatavari is also known for its anti-inflammatory and antioxidant effects, promoting overall well-being. It helps manage stress and boosts energy levels. The extract is widely used in Ayurvedic supplements and health products.

- **Botanical Name:** Asparagus Racemosus
  - **Other Names:** Shatavari (Hindi), Shatavari (Sanskrit)
  - **Plant Part Used:** Root
  - **Active Ingredient:** Shatavarin IV
  - **CAS No.:** 80681-44-3
  - **Appearance:** White to off-white powder.
  - **Uses:** Known for promoting female reproductive health, enhancing milk production, and acting as a tonic. It is used to boost vitality and regulate hormonal balance.
  - **Possible Combinations:** Can be combined with Ashwagandha for vitality and with other adaptogens for hormonal balance.
- 

## 3. Bacopa Monnieri (Brahmi)

Brahmi extract is sourced from the whole plant and is revered in Ayurvedic medicine for its cognitive-enhancing properties. It helps improve memory, focus, and learning abilities while reducing anxiety and stress. The extract is also known for its neuroprotective effects, promoting overall brain health. Brahmi is commonly used in formulations for mental wellness and stress management. It is also valued for its antioxidant properties.

- **Botanical Name:** Bacopa Monnieri

- **Other Names:** Brahmi, Water Hyssop
  - **Plant Part Used:** Whole plant
  - **Active Ingredient:** Bacoside A
  - **CAS No.:** 73554-59-7
  - **Appearance:** Green powder with a bitter taste.
  - **Uses:** Used for enhancing memory, cognitive function, and reducing anxiety. Brahmi is known to support mental clarity and has adaptogenic properties.
  - **Possible Combinations:** Works well with Ashwagandha or Shankhpushpi to enhance cognitive function.
- 

#### 4. Boswellia Serrata (Indian Frankincense)

Boswellia extract, sourced from the resin of the Boswellia tree, is renowned for its potent anti-inflammatory and pain-relieving properties. It is widely used in formulations for joint care, arthritis, and muscle pain. The extract is also effective in managing inflammatory conditions like asthma and irritable bowel syndrome. Boswellia supports healthy cartilage and connective tissue. It is a popular ingredient in both traditional and modern health supplements.

- **Botanical Name:** Boswellia Serrata
  - **Other Names:** Indian Frankincense
  - **Plant Part Used:** Resin
  - **Active Ingredient:** Acetyl-11-Keto-Beta-Boswellic Acid (AKBA)
  - **CAS No.:** 67416-61-9
  - **Appearance:** Brownish resin with an aromatic smell.
  - **Uses:** Known for its anti-inflammatory effects, Boswellia is used to treat conditions like osteoarthritis, joint inflammation, and other inflammatory diseases.
  - **Possible Combinations:** Can be combined with turmeric or ginger for enhanced anti-inflammatory effects.
- 

#### 5. Mulethi (Glycyrrhiza Glabra)

Mulethi extract is sourced from the roots of the licorice plant and is known for its sweet taste and medicinal benefits. It is widely used in formulations for respiratory health, soothing sore throats, and managing coughs. The extract has anti-inflammatory, antiviral, and antioxidant properties, making it effective in supporting immunity and skin health. Mulethi is also used to promote digestive health and relieve gastric discomfort.

- **Botanical Name:** Glycyrrhiza Glabra
- **Other Names:** Licorice
- **Plant Part Used:** Root

- **Active Ingredient:** Glycyrrhizin
  - **CAS No.:** 1405-86-3
  - **Appearance:** Light brown to yellowish powder.
  - **Uses:** Mulethi is used for soothing the digestive tract, reducing inflammation, and improving respiratory health. It also acts as an adaptogen.
  - **Possible Combinations:** Can be combined with Tulsi or Ginger for respiratory support and immunity enhancement.
- 

## 6. Gurmar (*Gymnema Sylvestre*)

Gurmar extract is obtained from the leaves of the plant and is traditionally known as the "Sugar Destroyer." It is highly effective in managing blood sugar levels and supporting diabetes care. The extract works by reducing sugar absorption in the intestines and suppressing sugar cravings. Gurmar is also known for its anti-inflammatory and cholesterol-lowering properties, promoting overall metabolic health.

- **Botanical Name:** *Gymnema Sylvestre*
  - **Other Names:** *Gymnema*, Gudmar, Gurmar
  - **Plant Part Used:** Leaves
  - **Active Ingredient:** Gymnemic Acid
  - **CAS No.:** 1393-22-6
  - **Appearance:** Green powder.
  - **Uses:** Known for its anti-diabetic properties, *Gymnema* helps in reducing sugar cravings and improving insulin sensitivity.
  - **Possible Combinations:** Can be combined with bitter melon (*Karela*) for diabetes management.
- 

## 7. *Mucuna Pruriens*

Velvet bean extract is obtained from the seeds of the plant and is known for its mood-enhancing and neuroprotective properties. It contains L-DOPA, a precursor to dopamine, which supports brain health and mental well-being. The extract is widely used to manage stress, improve mood, and enhance cognitive function. Velvet bean is also known for its role in promoting reproductive health and vitality.

- **Botanical Name:** *Mucuna Pruriens*
- **Other Names:** Velvet Bean (*Kaunch*)
- **Plant Part Used:** Seeds
- **Active Ingredient:** L-DOPA (Levodopa)
- **CAS No.:** 59-92-7

- **Appearance:** Brown to light beige powder.
  - **Uses:** Mucuna is used to support neurological health and improve dopamine levels, often used in Parkinson's disease treatment.
  - **Possible Combinations:** Can be combined with Ashwagandha for mood enhancement and stress relief.
- 

## 8. Ashwagandha (Withania Somnifera)

Ashwagandha extract is obtained from the roots of the plant and is renowned for its adaptogenic and rejuvenating properties. It is widely used to manage stress, enhance energy, and improve overall vitality. The extract also supports mental health, promotes better sleep, and boosts immunity. Ashwagandha is a staple in Ayurvedic formulations for physical and mental well-being.

- **Botanical Name:** Withania Somnifera
  - **Other Names:** Indian Ginseng, Winter Cherry
  - **Plant Part Used:** Root
  - **Active Ingredient:** Withaferin A
  - **CAS No.:** 5119-48-2
  - **Appearance:** Light brown to yellowish powder.
  - **Uses:** An adaptogen known for reducing stress, improving stamina, and supporting overall health.
  - **Doses:** 300–500 mg of extract per day.
  - **Possible Combinations:** Can be combined with Shatavari for hormonal balance or with Brahmi for mental clarity.
- 

## 9. Neem Leaf (Azadirachta Indica)

Neem leaf extract is obtained from the leaves of the Neem tree, which is often referred to as the "Village Pharmacy." The extract is well-known for its antibacterial, antifungal, and anti-inflammatory properties. It is widely used in skincare products for acne, infections, and wound healing. Neem is also effective in oral hygiene products for its ability to combat bacteria and maintain healthy gums. Additionally, it supports immune health and detoxification.

- **Botanical Name:** Azadirachta Indica
- **Other Names:** Indian Lilac
- **Plant Part Used:** Leaf
- **Active Ingredient:** Azadirachtin
- **CAS No.:** 11141-17-6
- **Appearance:** Greenish powder.

- **Uses:** Known for its antimicrobial, anti-inflammatory, and detoxifying properties. Neem supports skin health, reduces acne, and boosts immunity.
  - **Possible Combinations:** Can be combined with Turmeric for skin health and immunity support.
- 

## 10. Shilajit

Shilajit is a natural mineral resin collected from rocks in mountainous regions. Its extract is rich in fulvic acid and other essential minerals, making it a powerful rejuvenator and adaptogen. Shilajit is known to enhance energy, stamina, and overall vitality while supporting healthy ageing. It is commonly used to improve physical performance and mental clarity. The extract is also valued for its role in boosting immunity and promoting recovery from fatigue.

- **Botanical Name:** Asphaltum
  - **Other Names:** Mineral Pitch, Mumie
  - **Plant Part Used:** Resin
  - **Active Ingredient:** Fulvic Acid
  - **CAS No.:** 479-66-3
  - **Appearance:** Dark brown to blackish resin with a sticky texture.
  - **Uses:** Shilajit is used for rejuvenation, improving energy levels, enhancing endurance, and supporting immunity.
  - **Possible Combinations:** Can be combined with Ashwagandha for increased vitality or with Moringa for overall wellness.
- 

## 11. Vasaka (Adhatoda Vasica)

Vasaka extract is derived from the leaves of the Vasaka plant, a widely used herb in traditional medicine. It is renowned for its bronchodilator and anti-inflammatory properties, making it effective in managing respiratory disorders such as bronchitis, asthma, and cough. Vasaka is also known to help liquefy phlegm, thus aiding in easy expulsion. Its antibacterial properties make it beneficial for treating infections. It is commonly used in Ayurvedic formulations for respiratory health.

- **Botanical Name:** Adhatoda Vasica
- **Other Names:** Malabar Nut, Vasa
- **Plant Part Used:** Leaves
- **Active Ingredient:** Vasicine
- **CAS No.:** 6159-55-3
- **Appearance:** Greenish powder with a slightly bitter taste.

- **Uses:** Vasaka is primarily used for its bronchodilator and expectorant properties. It is commonly used in the treatment of respiratory conditions such as asthma, bronchitis, and chronic coughs.
  - **Possible Combinations:** Can be combined with Tulsi for respiratory support or with Ginger for additional anti-inflammatory effects.
- 

## 12. Karela (Momordica Charantia)

Bitter melon extract is obtained from the fruit of the plant and is highly valued for its ability to manage blood sugar levels. It is widely used in formulations for diabetes care and metabolic health. The extract contains compounds like charantin and polypeptide-p, which help regulate glucose metabolism. Bitter melon is also known for its antioxidant and anti-inflammatory properties, supporting overall wellness.

- **Botanical Name:** Momordica Charantia
  - **Other Names:** Bitter Melon, Karela
  - **Plant Part Used:** Fruit
  - **Active Ingredient:** Charantin
  - **CAS No.:** 57126-62-2
  - **Appearance:** Dark green powder.
  - **Uses:** Karela is used as a natural remedy for diabetes, as it helps regulate blood sugar levels. It also has antioxidant and anti-inflammatory properties.
  - **Possible Combinations:** Can be combined with Gymnema Sylvestre or Fenugreek for diabetes management.
- 

## 13. Hadjod (Cissus Quadrangularis)

Hadjod extract is obtained from the stems of the plant and is traditionally known as the "Bone Setter." It is highly regarded for its ability to support bone health and accelerate the healing of fractures. The extract is rich in antioxidants and has anti-inflammatory properties, making it effective in managing conditions like arthritis and joint pain. Hadjod is also used to enhance bone density and prevent osteoporosis.

- **Botanical Name:** Cissus Quadrangularis
- **Other Names:** Veld grape, Bone Setter
- **Plant Part Used:** Stem
- **Active Ingredient:** Ketosterones
- **CAS No.:** Not widely available
- **Appearance:** Greenish-brown powder.
- **Uses:** Known for its ability to support bone and joint health, Hadjod is used in treating fractures, bone diseases, and joint pain.

- **Possible Combinations:** Can be combined with Boswellia for enhanced joint support or with Turmeric for anti-inflammatory effects.
- 

#### 14. Daru Haldi (Berberis Aristata)

Daru Haldi extract is derived from the roots and stem of the plant and is known for its antimicrobial and antioxidant properties. It is widely used in skincare products to treat acne and other skin infections. The extract is also effective in managing digestive disorders and promoting liver health. Daru Haldi is often used in Ayurvedic formulations for its anti-inflammatory and detoxifying effects. It helps maintain overall wellness.

- **Botanical Name:** Berberis Aristata
  - **Other Names:** Indian Barberry
  - **Plant Part Used:** Root
  - **Active Ingredient:** Berberine
  - **CAS No.:** 2086-83-1
  - **Appearance:** Yellow powder.
  - **Uses:** Daru Haldi is known for its antimicrobial and anti-inflammatory properties. It is commonly used for digestive issues and skin conditions.
  - **Possible Combinations:** Can be combined with Neem for its antibacterial effects or with Turmeric for digestive health.
- 

#### 15. Giloy (Guduchi, Tinospora Cordifolia)

Giloy extract is sourced from the stem of the plant and is revered as an immunity booster and adaptogen in Ayurveda. It is widely used to manage fevers, enhance immunity, and combat infections. The extract is also effective in supporting liver health, improving digestion, and managing inflammatory conditions. Giloy is often called "Amrita" or "the root of immortality" for its holistic health benefits.

- **Botanical Name:** Tinospora Cordifolia
- **Other Names:** Guduchi, Amrita
- **Plant Part Used:** Stem
- **Active Ingredient:** Tinosporin
- **CAS No.:** Not widely available
- **Appearance:** Light green powder.
- **Uses:** Giloy is known for boosting immunity, fighting fever, and promoting overall health. It has detoxifying properties and is used to treat respiratory and digestive conditions.
- **Possible Combinations:** Can be combined with Ashwagandha for immunity enhancement or with Tulsi for respiratory support.

---

## 16. Gokhru (*Tribulus Terrestris*)

Gokhru extract is derived from the fruit of the plant and is known for its role in improving urinary and reproductive health. It is widely used in formulations to manage kidney stones, urinary tract infections, and sexual wellness. The extract contains saponins that help boost energy and enhance physical performance. Gokhru is also valued for its anti-inflammatory and diuretic properties.

- **Botanical Name:** *Tribulus Terrestris*
- **Other Names:** Puncturevine
- **Plant Part Used:** Fruit
- **Active Ingredient:** Protodioscin
- **CAS No.:** 55056-80-9
- **Appearance:** Yellowish-brown powder.
- **Uses:** Known for enhancing male reproductive health, libido, and improving athletic performance. It is also used for urinary health and kidney support.
- **Possible Combinations:** Can be combined with Ashwagandha for male health or with Ginseng for energy and vitality.

---

## 17. Kutki (*Picrorhiza Kurroa*)

Kutki extract is derived from the rhizomes of the plant and is known for its hepatoprotective and anti-inflammatory properties. It is widely used in formulations for liver health and detoxification. The extract is also effective in managing respiratory conditions, boosting immunity, and promoting overall wellness. Kutki is highly valued in traditional medicine for its bitter principles.

- **Botanical Name:** *Picrorhiza Kurroa*
- **Other Names:** Kutki
- **Plant Part Used:** Root
- **Active Ingredient:** Picroside I & II
- **CAS No.:** 39012-20-9 (Picroside I), 110743-30-7 (Picroside II)
- **Appearance:** Yellowish-brown powder.
- **Uses:** Used to treat liver disorders, jaundice, and to detoxify the liver. It also has anti-inflammatory and immunomodulatory properties.
- **Possible Combinations:** Can be combined with Kalmegh for liver detox or with Turmeric for anti-inflammatory effects.

---

## 18. Lodha (*Symplocos Racemosa*)



Lodha extract is derived from the bark of the plant and is widely recognized for its astringent and anti-inflammatory properties. It is effective in managing gynecological conditions, supporting uterine health, and promoting wound healing. The extract is also used in oral care products for its role in maintaining gum health. Lodha is a valued ingredient in formulations for skin and hair care as well.

- **Botanical Name:** Symplocos Racemosa
  - **Other Names:** Lodha
  - **Plant Part Used:** Bark
  - **Active Ingredient:** Tannins
  - **CAS No.:** Tannic Acid - 1401-55-4
  - **Appearance:** Brown powder.
  - **Uses:** Lodha is used to treat urinary tract infections, improve kidney function, and act as an anti-inflammatory.
  - **Possible Combinations:** Can be combined with Gokhru or Varun Chhal for urinary health.
- 

## 19. Punarnava (Boerhavia Diffusa)

Punarnava extract is obtained from the roots and leaves of the plant and is known for its diuretic, anti-inflammatory, and rejuvenating properties. It is widely used to support kidney and liver health, promoting detoxification and fluid balance. Punarnava is also effective in managing conditions like edema and urinary disorders. It is valued for its ability to restore vitality and energy. The extract is commonly used in Ayurvedic and herbal supplements.

- **Botanical Name:** Boerhavia Diffusa
  - **Other Names:** Punarnava
  - **Plant Part Used:** Root
  - **Active Ingredient:** Boeravinone B
  - **CAS No.:** 57126-67-7
  - **Appearance:** Light yellow powder.
  - **Uses:** Known for its diuretic, anti-inflammatory, and anti-arthritis properties. Punarnava is used to promote kidney health and to treat edema.
  - **Possible Combinations:** Can be combined with Gokhru for kidney support or with Kalmegh for liver detox.
- 

## 20. Varun Chhal (Crataeva Nurvala)

Varun Chhal extract is derived from the bark of the plant and is widely used in Ayurvedic medicine for urinary and kidney health. It helps manage urinary disorders, kidney stones, and infections. The extract has diuretic and anti-inflammatory properties, supporting detoxification and fluid balance. Varun Chhal is also known for its ability to improve prostate health and promote overall urinary system wellness.

- **Botanical Name:** Crataeva Nurvala
  - **Other Names:** Baheda
  - **Plant Part Used:** Bark
  - **Active Ingredient:** Lupeol
  - **CAS No.:** 545-47-1
  - **Appearance:** Brown powder.
  - **Uses:** Used for urinary tract health, particularly in treating kidney stones and promoting the flow of urine. It has anti-inflammatory properties as well.
  - **Possible Combinations:** Can be combined with Gokhru for enhanced kidney support or with Varun for joint pain.
- 

## 21. Fenugreek (Trigonella Foenum-Graecum)

Fenugreek extract is obtained from the seeds of the plant and is widely recognized for its nutritional and medicinal benefits. It is used in formulations to support blood sugar control, enhance lactation, and improve digestion. The extract also promotes hair and skin health, thanks to its rich antioxidant and nutrient content. Fenugreek is a versatile ingredient in both health and beauty products.

- **Botanical Name:** Trigonella Foenum-Graecum
  - **Other Names:** Methi
  - **Plant Part Used:** Seeds
  - **Active Ingredient:** Trigonelline
  - **CAS No.:** 535-83-1
  - **Appearance:** Yellowish-brown powder with a slightly bitter taste.
  - **Uses:** Fenugreek is widely used for regulating blood sugar levels, promoting digestion, and enhancing lactation in breastfeeding mothers. It is also known for its anti-inflammatory and antioxidant properties.
  - **Possible Combinations:** Can be combined with Karela or Bitter Melon for diabetes management or with Turmeric for anti-inflammatory benefits.
- 

## 22. Nirgundi (Vitex Negundo)

Nirgundi extract is sourced from the leaves of the plant and is known for its pain-relieving and anti-inflammatory properties. It is widely used in formulations to manage arthritis,

joint pain, and muscular inflammation. The extract also supports respiratory health and is effective in managing conditions like asthma and sinusitis. Nirgundi is valued in traditional medicine for its calming and detoxifying benefits.

- **Botanical Name:** Vitex Negundo
  - **Other Names:** Five-Leaved Chaste Tree
  - **Plant Part Used:** Leaves
  - **Active Ingredient:** Negundoside
  - **CAS No.:** 54843-22-8
  - **Appearance:** Greenish powder.
  - **Uses:** Nirgundi is traditionally used for treating arthritis, joint pain, and as an anti-inflammatory. It also has neuroprotective and antimicrobial properties.
  - **Possible Combinations:** Can be combined with Gokhru for joint support or with Ashwagandha for general well-being.
- 

## 23. Tulsi (Ocimum Sanctum)

Tulsi extract is sourced from the leaves of the plant and is revered as a sacred herb in Ayurveda. It is known for its adaptogenic, antioxidant, and antimicrobial properties. The extract is effective in managing stress, boosting immunity, and supporting respiratory health. Tulsi is also used in formulations for skin care, digestive health, and detoxification.

- **Botanical Name:** Ocimum Sanctum
  - **Other Names:** Holy Basil
  - **Plant Part Used:** Leaves
  - **Active Ingredient:** Eugenol
  - **CAS No.:** 97-53-0
  - **Appearance:** Greenish powder.
  - **Uses:** Tulsi is renowned for its adaptogenic and immune-boosting properties. It helps in reducing stress, managing respiratory disorders, and maintaining overall health.
  - **Possible Combinations:** Can be combined with Giloy for immune enhancement or with Vasaka for respiratory health.
- 

## 24. Jivanti (Leptadenia Reticulata)

Jivanti extract is sourced from the whole plant and is known for its rejuvenating and adaptogenic properties. It is traditionally used to enhance vitality, stamina, and overall health. The extract is effective in managing stress, boosting immunity, and improving reproductive health. Jivanti is also used in formulations for lactation support and to promote healthy ageing.

- **Botanical Name:** Leptadenia Reticulata
  - **Other Names:** Jivanti
  - **Plant Part Used:** Root
  - **Active Ingredient:** Leptadenoside
  - **CAS No.:** Not widely reported
  - **Appearance:** Yellowish-brown powder.
  - **Uses:** Jivanti is used to treat general weakness, enhance vitality, and improve immunity. It is also beneficial for promoting milk production in nursing mothers.
  - **Possible Combinations:** Can be combined with Ashwagandha for vitality or with Shatavari for lactation support.
- 

## 25. Sarpgandha (Rauwolfia Serpentina)

Sarpgandha extract is derived from the roots of the plant and is well-known for its tranquilizing and antihypertensive properties. It is widely used in formulations for managing high blood pressure and calming the nervous system. The extract contains alkaloids like reserpine, which are effective in reducing anxiety and improving sleep quality. Sarpgandha is also valued for its role in traditional medicine to manage mental health conditions and insomnia.

- **Botanical Name:** Rauwolfia Serpentina
  - **Other Names:** Indian Snakeroot
  - **Plant Part Used:** Root
  - **Active Ingredient:** Reserpine
  - **CAS No.:** 50-55-5
  - **Appearance:** Brownish powder.
  - **Uses:** Sarpgandha is traditionally used for its calming effects, especially in reducing high blood pressure and anxiety. It is also used in the treatment of insomnia and mental disorders.
  - **Possible Combinations:** Can be combined with Ashwagandha for stress relief or with Brahmi for mental clarity.
- 

## 26. Moringa (Moringa Oleifera)

Moringa extract is derived from the leaves, seeds, and pods of the plant and is often referred to as the "Miracle Tree." It is rich in vitamins, minerals, and antioxidants, making it a nutritional powerhouse. The extract is widely used to support immunity, energy, and overall health. Moringa is also effective in managing inflammation and promoting skin and hair health.

- **Botanical Name:** Moringa Oleifera

- **Other Names:** Drumstick Tree
  - **Plant Part Used:** Leaves
  - **Active Ingredient:** Moringin
  - **CAS No.:** Not widely reported
  - **Appearance:** Green powder.
  - **Uses:** Moringa is packed with nutrients and antioxidants. It is used to support overall health, including immune health, digestive health, and as an energy booster.
  - **Possible Combinations:** Can be combined with Ashwagandha for energy or with Tulsi for immune support.
- 

## 27. Kantkari (*Solanum Xanthocarpum*)

Kantkari extract is sourced from the whole plant and is known for its respiratory and anti-inflammatory benefits. It is widely used in formulations to manage conditions like asthma, bronchitis, and cough. The extract also supports digestion and is effective in managing conditions like bloating and flatulence. Kantkari is valued in traditional medicine for its ability to balance respiratory and digestive systems.

- **Botanical Name:** *Solanum Xanthocarpum*
  - **Other Names:** Yellow-berried Nightshade
  - **Plant Part Used:** Fruit
  - **Active Ingredient:** Solasodine
  - **CAS No.:** 126-17-0
  - **Appearance:** Greenish-yellow powder.
  - **Uses:** Kantkari is used for respiratory health, especially in the treatment of asthma and cough. It also has anti-inflammatory and analgesic properties.
  - **Possible Combinations:** Can be combined with Vasaka for respiratory health or with Tulsi for immune support.
- 

## 28. Chitrakmool (*Plumbago Zeylanica*)

Chitrakmool extract is sourced from the roots of the plant and is known for its digestive and metabolic benefits. It is widely used in formulations to stimulate appetite, improve digestion, and support weight management. The extract has anti-inflammatory and antimicrobial properties, making it effective in managing skin and joint conditions.

- **Botanical Name:** *Plumbago Zeylanica*
- **Other Names:** Ceylon Leadwort
- **Plant Part Used:** Root
- **Active Ingredient:** Plumbagin
- **CAS No.:** 481-42-5

- **Appearance:** Yellowish powder.
  - **Uses:** Chitrakmool is primarily used for digestive issues, including constipation and indigestion. It is also known for its antimicrobial and anti-inflammatory properties.
  - **Possible Combinations:** Can be combined with Kutki for liver support or with Turmeric for anti-inflammatory effects.
- 

## 29. Manjishtha (Rubia Cordifolia)

Manjistha extract is obtained from the roots of the plant and is renowned for its blood-purifying and detoxifying properties. It is widely used in formulations to support skin health, manage pigmentation, and improve complexion. The extract also has anti-inflammatory and antimicrobial properties, making it effective in managing skin disorders like acne and eczema. Manjistha is also used to support liver health and promote overall wellness.

- **Botanical Name:** Rubia Cordifolia
  - **Other Names:** Indian Madder
  - **Plant Part Used:** Root
  - **Active Ingredient:** Rubiadin
  - **CAS No.:** 117-02-2
  - **Appearance:** Reddish-brown powder.
  - **Uses:** Manjishtha is used for its detoxifying properties, particularly for skin health, and is beneficial in managing blood disorders, improving circulation, and supporting the lymphatic system.
  - **Possible Combinations:** Can be combined with Turmeric for skin health or with Ashwagandha for vitality.
- 

## 30. Banaba Leaf (Lagerstroemia Speciosa)

Banaba leaf extract is derived from the leaves of the plant and is widely recognized for its role in blood sugar management. It contains corosolic acid, which helps regulate glucose metabolism and improve insulin sensitivity. The extract is also rich in antioxidants, supporting overall wellness and cellular health. Banaba leaf is a popular ingredient in formulations for weight management and diabetes care.

- **Botanical Name:** Lagerstroemia Speciosa
- **Other Names:** Banaba
- **Plant Part Used:** Leaves
- **Active Ingredient:** Corosolic Acid
- **CAS No.:** 4547-24-4
- **Appearance:** Greenish-brown powder.

- **Uses:** Banaba Leaf is primarily used to regulate blood sugar levels and promote weight loss. It also has antioxidant properties
  - **Possible Combinations:** Can be combined with Fenugreek for diabetes management or with Gymnema Sylvestre for enhanced blood sugar control.
- 

### 31. Papaya (Carica Papaya)

Papaya extract is derived from the fruit and leaves of the papaya plant and is highly valued for its digestive and anti-inflammatory properties. The enzyme papain, found in papaya, helps improve digestion and protein absorption. It is widely used in formulations for gastrointestinal health and as a natural remedy for constipation. Papaya extract is also known for its wound-healing and skin-soothing benefits, making it a popular ingredient in cosmetics.

- **Botanical Name:** Carica Papaya
  - **Other Names:** Pawpaw
  - **Plant Part Used:** Fruit
  - **Active Ingredient:** Papain
  - **CAS No.:** 9001-73-4
  - **Appearance:** Yellowish powder.
  - **Uses:** Papaya is used for its digestive benefits, especially in treating indigestion and bloating. It also has anti-inflammatory and wound-healing properties.
  - **Possible Combinations:** Can be combined with Ginger for digestive support or with Turmeric for anti-inflammatory effects.
- 

### 32. AKBA (Acetyl-11-Keto-Beta-Boswellic Acid)

AKBA is a concentrated extract of Boswellia serrata resin, known for its powerful anti-inflammatory properties. It is particularly effective in managing chronic inflammatory conditions like arthritis and inflammatory bowel disease. AKBA helps reduce pain, improve joint mobility, and support overall joint health. Its targeted action makes it a key ingredient in advanced joint care formulations. The extract is also valued for its role in respiratory health.

- **Botanical Name:** Boswellia Serrata
- **Other Names:** AKBA
- **Plant Part Used:** Resin
- **Active Ingredient:** Acetyl-11-Keto-Beta-Boswellic Acid (AKBA)
- **CAS No.:** 67416-61-9
- **Appearance:** Pale yellow powder.

- **Uses:** AKBA is used for its anti-inflammatory effects, particularly for joint health, and as a treatment for osteoarthritis, rheumatoid arthritis, and inflammatory bowel disease (IBD).
- **Possible Combinations:** Can be combined with Turmeric for enhanced anti-inflammatory effects or with Boswellia Serrata for joint support.

### 33. Cymbopogon flexuosus (Indian Lemongrass)

Cymbopogon flexuosus, commonly known as East Indian Lemongrass, is a tall, aromatic grass native to India and Southeast Asia. Renowned for its fresh, citrusy aroma with earthy undertones, it is widely cultivated for its essential oil, which is rich in citral — a key ingredient in perfumes, cosmetics, and wellness products. The plant's robust growth and high oil yield make it a favorite in the aromatherapy and natural remedies market.

- **Botanical Name:** Cymbopogon flexuosus  
**Other Names:** East Indian Lemongrass, Cochin Lemongrass  
**Plant Part Used:** Leaves  
**Active Ingredient:** Citral (Geranial and Neral)  
**CAS No.:** 91844-92-7  
**Appearance:** Pale to amber-yellow liquid.

#### Uses:

- Aromatherapy for relaxation and stress relief.
  - Antibacterial and antifungal applications in skincare and personal care products.
  - Natural insect repellent and household cleaner.
  - Supports digestive health and boosts immunity.
- Possible Combinations:** Combines well with Eucalyptus for respiratory support, Lavender for calming effects, and Tea Tree for antibacterial formulations.

### 33. Curcumin

Curcumin is a bright yellow compound derived from turmeric (Curcuma longa). It is a polyphenol and the primary active component responsible for turmeric's vibrant color and medicinal properties. Known for its potent antioxidant, anti-inflammatory, and antimicrobial activities, curcumin is widely used in pharmaceuticals, cosmetics, and food products.

- **Botanical Name:** Curcuma longa
- **Other Names:** Diferuloylmethane, Turmeric Extract, Yellow Root, Haridra, Jiang Huang, Haldi



- **Plant Part Used:** Rhizome (Turmeric Root)
- **Active Ingredient:** Curcumin (C<sub>21</sub>H<sub>20</sub>O<sub>6</sub>)
- **CAS No.:** 458-37-7
- **Appearance:** Yellow to orange crystalline powder

#### Uses:

- **Pharmaceuticals:** Used for anti-inflammatory, antioxidant, and anticancer properties; supports joint health, digestion, and immune function.
- **Cosmetics:** Added in skincare products for its anti-aging, skin-brightening, and anti-inflammatory effects.
- **Food Industry:** Used as a natural food coloring and flavor enhancer; incorporated into functional foods and beverages for its health benefits.
- **Nutraceuticals:** Found in dietary supplements for promoting overall wellness and reducing chronic inflammation.

#### Possible Combinations:

- **Piperine (Black Pepper Extract):** Enhances bioavailability of curcumin.
- **Ginger Extract:** Provides synergistic anti-inflammatory benefits.
- **Boswellia Serrata:** Enhances joint and muscle health.
- **Ashwagandha:** Combines for stress relief and antioxidant benefits.
- **Omega-3 Fatty Acids:** Supports anti-inflammatory and cardiovascular health.

---

### → Standard Packing Material Overview. (home page)

At Vayu Naturals, we use high-quality, export-compliant packaging to ensure product integrity and safety. Our primary packaging includes MS drums, SS drums, HDPE drums, aluminum bottles and Fiber Drums, while secondary and tertiary packaging offers cushioning and transit stability. We are committed to eco-friendly practices, continuously exploring sustainable alternatives. [Click to Read More...](#)

#### Packing Materials Overview – Vayu Naturals (Sub page)

At **Vayu Naturals**, we prioritize premium and export-compliant packaging to ensure the integrity, safety, and quality of our essential oils, MAP extracts, and aroma chemicals. Our packaging solutions are designed to protect products during transit while maintaining their freshness and potency.

#### Primary Packaging:

- Direct contact containers such as epoxy-lined MS drums, stainless steel drums, HDPE drums, and aluminum bottles.
- These materials prevent contamination, leakage, and oxidation, ensuring product stability.

**Secondary Packaging:**

- Corrugated cardboard boxes (5-ply) with eco-friendly cushioning provide additional protection from physical damage.
- Clear labeling includes product information, batch numbers, certifications, and handling instructions.

**Tertiary Packaging:**

- Standard wooden pallets (fumigated as per ISPM 15 standards), stretch film, and strapping ensure stability during export transit.
- Outer cartons display essential shipping information such as consignee details, HS code, and net/gross weight.

**Sustainable Commitment:**

We are continuously working to reduce our environmental footprint by exploring biodegradable, recyclable, and eco-friendly alternatives without compromising on quality.