



**GALILEO**

ESSENTIAL OILS & MORE

# FENNEL

Specifications



## General Specification

|                  |   |
|------------------|---|
| Product Name     | Fennel Essential Oil (Egyptian – Steam Distilled – Galileo) |
| Botanical Name   | Foeniculum vulgare  |
| Botanical Family | Apiaceae  |
| Description      | Essential oil obtained from seeds                           |
| Status           | Organic   |
| Manufacturer     | GMS TRADE   |
| Harvest Season   | May- Sep  |

## Physical Specification

| Parameter           | Requirement                                    | Test Method  |
|---------------------|--|--------------|
| Appearance          | Clear to pale yellow liquid                    | Visual       |
| Odor                | Sweet- Anise - Warm -Herbaceous                | Organoleptic |
| Taste               | Sweet- Licorice                                | Organoleptic |
| Solubility          | Soluble in ethanol & oils – Insoluble in water | Visual       |
| Specific Gravity    | 0.950 – 0.980 @ 20°C                           | ASTM D4052   |
| Specific Refractive | 1.488 – 1.495 @ 20°C                           | ASTM D1218   |

## Chemical Specification

| Primary Constituents        | Anethole, Fenchone |             |
|-----------------------------|--------------------|-------------|
| Parameter                   | Requirement %      | Test Method |
| Anethole                    | 50 – 70            | GC-MS       |
| Fenchone                    | 10 – 25            | GC-MS       |
| Estragole (Methyl chavicol) | 3 – 10             | GC-MS       |
| Limonene                    | 1 – 5              | GC-MS       |
| α-Pinene                    | 1 – 3              | GC-MS       |

## Key Applications & Benefits

| Property          | Usage  | Advantage  |
|-------------------|--|--|
| Primary Profile   | Perfumery - Aromatherapy<br>Anxiolytic - Sedative                  | Valuable In holistic formulations<br>Mild aromatherapeutic ingredient                            |
| Skin Care Profile | Promotes skin cell regeneration<br>Tighten skin - Reduces wrinkles | Rejuvenating<br>Natural Astringent   |
| Hair Care Profile | Scalp care - Hair growth   | Dual-action benefit of improving scalp health while cosmetically enhancing the hair's appearance |

