



## SAFETY DATA SHEET (SDS)

---

**Product Name:** Limonene D Natural  
**Chemical Name:** d-Limonene (R-Limonene)  
**CAS Number:** 5989-27-5  
**EC Number:** 227-813-5  
**FEMA Number:** 2633  
**Product Type:** Natural Aroma Chemical (Monoterpene)  
**Source:** Citrus Peel Oils  
**Recommended Use:** Fragrance ingredient for perfumery and cosmetic applications.  
**Supplier:** Aromology Trading LLC  
**Issue Date:** 05 August 2025  
**Version:** 1.0

---

### SECTION 1: IDENTIFICATION

**Product Identifier:** Limonene D Natural  
**Recommended Use:** Perfumery, cosmetics, aromatics and fragrance applications.  
**Emergency Telephone:** +971 505 197 601

---

### SECTION 2: HAZARDS IDENTIFICATION

#### GHS Classification

| Hazard Class             | Category   |
|--------------------------|------------|
| Flammable Liquid         | Category 3 |
| Aspiration Hazard        | Category 1 |
| Skin Irritation          | Category 2 |
| Skin Sensitisation       | Category 1 |
| Aquatic Acute Toxicity   | Category 1 |
| Aquatic Chronic Toxicity | Category 1 |

**Signal Word:** Danger

#### Hazard Statements

H226 Flammable liquid and vapour.

H304 May be fatal if swallowed and enters airways.

H315 Causes skin irritation.



H317 May cause an allergic skin reaction.

H410 Very toxic to aquatic life with long-lasting effects.

### **Precautionary Statements**

P210 Keep away from heat, sparks and open flames.

P261 Avoid breathing vapours.

P273 Avoid release to the environment.

P280 Wear protective gloves and eye protection.

P301+P310 IF SWALLOWED: Immediately call a poison centre or physician.

P331 Do not induce vomiting.

P391 Collect spillage.

P501 Dispose of contents/container according to local regulations.

---

### **SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS**

| <b>Component</b>     | <b>CAS Number</b> | <b>Concentration</b> |
|----------------------|-------------------|----------------------|
| d-Limonene (Natural) | 5989-27-5         | ≥95%                 |

---

### **SECTION 4: FIRST AID MEASURES**

#### **Inhalation**

Move to fresh air.

Seek medical attention if symptoms persist.

#### **Skin Contact**

Wash thoroughly with soap and water.

Remove contaminated clothing.

#### **Eye Contact**



Flush cautiously with water for at least 15 minutes.

Seek medical attention if irritation persists.

### **Ingestion**

Do not induce vomiting.

Immediately seek medical attention because of aspiration hazard.

### **Symptoms**

Skin irritation.

Allergic skin reaction.

Respiratory irritation.

Aspiration hazard.

---

## **SECTION 5: FIREFIGHTING MEASURES**

### **Suitable Extinguishing Media**

- Carbon dioxide
- Dry chemical powder
- Alcohol-resistant foam
- Water spray

### **Unsuitable Extinguishing Media**

Direct water jet.

### **Hazardous Combustion Products**

Carbon monoxide.

Carbon dioxide.

Irritating organic vapours.

### **Protective Equipment**



Self-contained breathing apparatus and protective clothing.

---

## **SECTION 6: ACCIDENTAL RELEASE MEASURES**

Eliminate ignition sources.

Ensure adequate ventilation.

Avoid contact with skin and eyes.

Prevent entry into drains and waterways.

Absorb using inert material such as sand or vermiculite.

Dispose according to local regulations.

---

## **SECTION 7: HANDLING AND STORAGE**

### **Handling**

Avoid breathing vapours.

Avoid prolonged skin contact.

Use only in well-ventilated areas.

Keep away from heat and ignition sources.

### **Storage**

Store below 25°C.

Protect from sunlight and air.

Keep container tightly closed.

Store away from oxidising agents.

---

## **SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION**



### Exposure Limits

No occupational exposure limits established.

### Engineering Controls

Provide adequate ventilation.

### Eye Protection

Safety goggles.

### Skin Protection

Chemical-resistant gloves.

### Respiratory Protection

Organic vapour respirator where ventilation is inadequate.

---

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

| Property                | Specification                                   |
|-------------------------|-------------------------------------------------|
| Appearance              | Clear colourless liquid                         |
| Odour                   | Fresh, citrus, orange peel                      |
| Flash Point             | Approximately 50 °C                             |
| Boiling Point           | Approximately 176 °C                            |
| Relative Density @20 °C | 0.839–0.845                                     |
| Refractive Index @20 °C | 1.472–1.474                                     |
| Optical Rotation        | +95° to +105°                                   |
| Solubility              | Insoluble in water; soluble in alcohol and oils |

---

## SECTION 10: STABILITY AND REACTIVITY

### Reactivity

Stable under recommended conditions.

### Chemical Stability



Stable under normal storage conditions.

#### **Conditions to Avoid**

Heat.

Open flames.

Air oxidation.

Strong oxidising agents.

#### **Hazardous Decomposition Products**

Carbon oxides.

Organic decomposition products.

---

### **SECTION 11: TOXICOLOGICAL INFORMATION**

#### **Likely Routes of Exposure**

- Skin
- Eyes
- Inhalation
- Ingestion

#### **Effects**

Skin irritation.

May cause allergic skin reaction, particularly after oxidation.

Eye irritation.

Aspiration hazard if swallowed.

No evidence of carcinogenicity, mutagenicity or reproductive toxicity based on available information.

---

### **SECTION 12: ECOLOGICAL INFORMATION**



Very toxic to aquatic life with long-lasting effects.

Avoid release into the environment.

Biodegradable under environmental conditions but hazardous to aquatic organisms.

---

## SECTION 13: DISPOSAL CONSIDERATIONS

Dispose of contents and containers in accordance with local and national regulations.

Prevent contamination of drains and waterways.

---

## SECTION 14: TRANSPORT INFORMATION

| Parameter            | Information                                        |
|----------------------|----------------------------------------------------|
| UN Number            | UN 2319                                            |
| Proper Shipping Name | Terpene Hydrocarbons, N.O.S. (contains d-Limonene) |
| Hazard Class         | 3                                                  |
| Packing Group        | III                                                |
| Marine Pollutant     | Yes                                                |

---

## SECTION 15: REGULATORY INFORMATION

Prepared in accordance with:

- UN GHS (Latest Edition)
  - Regulation (EC) No. 1272/2008 (CLP)
  - Regulation (EC) No. 1907/2006 (REACH)
  - Applicable IFRA Standards
- 

## SECTION 16: OTHER INFORMATION

This Safety Data Sheet provides guidance for the safe handling, storage, transport and use of Limonene D Natural for perfumery, cosmetic and aromatic applications.



Natural d-Limonene is obtained primarily from citrus peel oils by fractional distillation and is widely used as a fragrance ingredient and natural solvent.

**Prepared By:**

**Fozia Khot**

**Title:** Director

**Company:** Aromology Trading LLC

**Issue Date:** 05 August 2025

**Version:** 1.0