



SAFETY DATA SHEET (SDS)

Prepared in accordance with the Globally Harmonized System (GHS) and Regulation (EC) No. 1907/2006 (REACH, as amended)

SECTION 1: Identification

Product Identifier

Product Name: Safranal Oil

Chemical Name: Safranal

CAS Number: 116-26-7

EC Number: 204-133-7

Chemical Formula: C₁₀ H₁₄O

Molecular Weight: 150.22 g/mol

Safranal is the principal aroma constituent naturally occurring in saffron (*Crocus sativus*).

Recommended Use

Perfumery raw material for fragrance creation and cosmetic manufacturing.

Professional use only.

Supplier

Aromology Trading LLC
G05 Al Ghazal Building
Nadd Al Hamar
Dubai
United Arab Emirates

Email: info@aromology.com
Website: www.aromology.com

SECTION 2: Hazard Identification



Classification (GHS)

- Acute Toxicity (Oral) – Category 4
- Skin Irritation – Category 2
- Eye Irritation – Category 2A
- Skin Sensitisation – Category 1
- Hazardous to the Aquatic Environment (Chronic) – Category 2

Signal Word

Warning

Hazard Pictograms

- GHS07 – Exclamation Mark
- GHS09 – Environment

Hazard Statements

- H302 Harmful if swallowed.
- H315 Causes skin irritation.
- H317 May cause an allergic skin reaction.
- H319 Causes serious eye irritation.
- H411 Toxic to aquatic life with long lasting effects.

Precautionary Statements

- P261 Avoid breathing vapours.
- P264 Wash thoroughly after handling.
- P270 Do not eat, drink or smoke when using this product.
- P273 Avoid release to the environment.
- P280 Wear protective gloves and eye protection.
- P302+P352 IF ON SKIN: Wash with plenty of soap and water.
- P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes.

SECTION 3: Composition / Information on Ingredients



Component	CAS No.	EC No.	Concentration
Safranal	116-26-7	204-133-7	≥98%

SECTION 4: First Aid Measures

Inhalation

Move the affected person to fresh air.

Seek medical attention if symptoms persist.

Skin Contact

Wash immediately with soap and water.

Remove contaminated clothing.

Obtain medical advice if irritation develops.

Eye Contact

Flush cautiously with water for at least 15 minutes.

Remove contact lenses if present.

Seek medical attention if irritation continues.

Ingestion

Rinse mouth thoroughly.

Do not induce vomiting.

Immediately seek medical attention.

SECTION 5: Fire Fighting Measures

Suitable Extinguishing Media

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



- Water spray

Unsuitable Media

High-pressure water jet.

Hazardous Combustion Products

- Carbon monoxide
- Carbon dioxide
- Irritating organic vapours

Protective Equipment

Wear self-contained breathing apparatus and protective clothing.

SECTION 6: Accidental Release Measures

Wear suitable personal protective equipment.

Avoid breathing vapours.

Prevent entry into drains and waterways.

Absorb spill with inert absorbent material such as sand or vermiculite.

Collect into suitable disposal containers.

Wash contaminated area thoroughly.

SECTION 7: Handling and Storage

Handling

Avoid skin and eye contact.

Avoid inhalation of vapours.

Use only in well-ventilated areas.

Observe good industrial hygiene practices.



Storage

Store in tightly closed containers.

Keep in a cool, dry and well-ventilated place.

Protect from heat, light and sources of ignition.

Keep away from oxidising agents.

Recommended storage temperature:
15–25 °C.

SECTION 8: Exposure Controls / Personal Protection

Engineering Controls

Provide adequate local exhaust ventilation.

Personal Protective Equipment

Eye Protection

Chemical safety goggles.

Hand Protection

Chemical-resistant nitrile gloves.

Respiratory Protection

Organic vapour respirator where ventilation is insufficient.

Skin Protection

Protective laboratory clothing.

SECTION 9: Physical and Chemical Properties

Property	Specification
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Property	Specification
Appearance	Clear pale yellow to yellow liquid
Odour	Powerful saffron, warm, spicy, leathery
Physical State	Liquid
Molecular Formula	$C_{10}H_{14}O$
Molecular Weight	150.22 g/mol
Density (20 °C)	Approximately 0.97 g/cm ³
Boiling Point	Approximately 70 °C (at reduced pressure)
Flash Point	Approximately 90–100 °C
Water Solubility	Practically insoluble
Solubility	Soluble in ethanol and organic solvents
Refractive Index (20 °C)	Approximately 1.52

SECTION 10: Stability and Reactivity

Stable under recommended storage conditions.

Conditions to Avoid

- Heat
- Flames
- Direct sunlight
- Oxidising conditions

Incompatible Materials

Strong oxidising agents.

Hazardous Decomposition Products

Carbon oxides and irritating fumes.

SECTION 11: Toxicological Information

May cause:

- Harmful if swallowed.
- Skin irritation.
- Serious eye irritation.



- Allergic skin reactions in susceptible individuals.

No evidence of carcinogenicity under normal conditions of use.

SECTION 12: Ecological Information

Toxic to aquatic organisms with long-lasting effects.

Avoid uncontrolled environmental release.

SECTION 13: Disposal Considerations

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

Do not discharge into drains or waterways.

SECTION 14: Transport Information

Item	Information
UN Number	UN3082
Proper Shipping Name	Environmentally Hazardous Substance, Liquid, N.O.S. (Safranal)
Transport Class	9
Packing Group	III
Marine Pollutant	Yes

SECTION 15: Regulatory Information

Prepared in accordance with:

- Globally Harmonized System (GHS)
 - REACH Regulation (EC) No. 1907/2006
 - CLP Regulation (EC) No. 1272/2008
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SECTION 16: Other Information

Safranal is a naturally occurring apocarotenoid aldehyde and the primary aroma constituent of saffron (*Crocus sativus*). It is widely used in fine fragrance and flavour applications for its distinctive warm, leathery, spicy, and saffron-like odour.

The information contained in this Safety Data Sheet is believed to be accurate at the date of issue and is provided solely for guidance regarding the safe handling, storage, transport and use of this material. It does not constitute a guarantee of specific product properties.

Authorised By:
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Director