

**SAFETY DATA SHEET****500930 SAFRANAL**

Revision Date: 05-01-2015

Page 1 of 10

Version # 01

Print Date: 11-23-2015

**1. IDENTIFICATION**

<b>Product Description:</b>	<b>SAFRANAL</b>
<b>CAS #</b>	116-26-7
<b>FEMA Number</b>	3389
<b>Other means of identification</b>	
<b>Vigon Item #</b>	500930
<b>Recommended use</b>	Concentrated aromatic and flavor ingredient which may be used in flavor and fragrance compounds according to legal and IFRA or FEMA GRAS/FDA guidelines.
<b>Recommended restrictions</b>	For Manufacturing Use Only
<b>Company</b>	<b>24 Hour Emergency Response Information</b>
Vigon International, Inc.	INFOTRAC (ACCT# 78928);
127 Airport Road	1-800-535-5053 WITHIN THE U.S.A.
E. Stroudsburg, PA 18301	1-352-323-3500 OUTSIDE THE U.S.A.
For information call: 570-476-6300	
Web Site: www.vigon.com	

**2. HAZARD(S) IDENTIFICATION**

<b>Physical hazards</b>	Flammable liquids	Category 4
<b>Health hazards</b>	Skin corrosion/irritation	Category 2
	Serious eye damage/eye irritation	Category 2A
	Sensitization, skin	Category 1
<b>Environmental hazards</b>	Not classified.	
<b>Label elements</b>		



<b>Signal word</b>	Warning
<b>Hazard statement</b>	
H227	Combustible liquid.
H315	Causes skin irritation.
H315 + H320	Causes skin and eye irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.

**Precautionary statement****Prevention**

P210	Keep away from heat/sparks/open flames/hot surfaces. No smoking.
P261	Avoid breathing mist or vapor.
P264	Wash thoroughly after handling.
P272	Contaminated work clothing should not be allowed out of the workplace.
P280	Wear protective gloves/eye protection/face protection.

## SAFETY DATA SHEET

500930 SAFRANAL

Revision Date: 05-01-2015

Page 2 of 10

Version # 01

Print Date: 11-23-2015

### Response

P302 + P352 IF ON SKIN: Wash with plenty of water.  
 P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
 P333 + P313 If skin irritation or rash occurs: Get medical advice/attention.  
 P337 + P313 If eye irritation persists: Get medical advice/attention.  
 P362 + P364 Take off contaminated clothing and wash it before reuse.  
 P370 + P378 In case of fire: Use appropriate media to extinguish.

### Storage

P403 + P235 Store in a well-ventilated place. Keep cool.

### Disposal

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

### Hazard(s) not otherwise classified (HNOC)

After prolonged contact with highly porous materials, this product may spontaneously combust.

### Supplemental information

None.

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

### Substances

Chemical name	Common name and synonyms	CAS number	%
2,6,6-TRIMETHYL-1,3- CYCLO HEXADIENYL-1 CARBALDEHYDE	2,3- dihydro-2,2,6-trimethyl benzaldehyde 1,3- cyclohexadiene-1-carboxaldehyde, 2,6,6-trimethyl- 3,4- didehydro-7-apo-b-caroten-7-al	116-26-7	100

## 4. FIRST-AID MEASURES

**Inhalation** If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing. For breathing difficulties, oxygen may be necessary. Call a physician if symptoms develop or persist.

**Skin contact** Take off immediately all contaminated clothing. Get medical attention if irritation develops and persists. Wash skin thoroughly with soap and water for several minutes.

**Eye contact** Remove contact lenses, if present and easy to do. Get medical attention if irritation develops and persists. Promptly wash eyes with plenty of water while lifting the eye lids.

**Ingestion** Call a physician or poison control center immediately. If swallowed, rinse mouth with water (only if the person is conscious). Do not induce vomiting. If vomiting occurs, the head should be kept low so that stomach vomit doesn't enter the lungs.

**Most important symptoms/effects, acute and delayed** Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Skin irritation. May cause redness and pain. May cause an allergic skin reaction. Dermatitis. Rash.

**Indication of immediate medical attention and special treatment needed** Not available.

**General information** Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance.



## SAFETY DATA SHEET

500930 SAFRANAL

Revision Date: 05-01-2015

Page 3 of 10

Version # 01

Print Date: 11-23-2015

---

### 5. FIRE-FIGHTING MEASURES

<b>Suitable extinguishing media</b>	Water spray, fog, CO2, dry chemical, or alcohol resistant foam.
<b>Unsuitable extinguishing media</b>	Do not use a solid water stream as it may scatter and spread fire.
<b>Specific hazards arising from the chemical</b>	Fire may produce irritating, corrosive and/or toxic gases. Porous material such as rags, paper, insulation, or organic clay may spontaneously combust when wetted with this material.
<b>Special protective equipment and precautions for firefighters</b>	Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA. Structural firefighters protective clothing will only provide limited protection. Wear self-contained breathing apparatus with a full facepiece operated in the positive pressure demand mode when fighting fires.
<b>Fire fighting equipment/instructions</b>	In case of fire and/or explosion do not breathe fumes. Use standard firefighting procedures and consider the hazards of other involved materials. Move containers from fire area if you can do so without risk. Water runoff can cause environmental damage. Ventilate closed spaces before entering them. Keep run-off water out of sewers and water sources. Dike for water control.
<b>Specific methods</b>	Use water spray to cool unopened containers.
<b>General fire hazards</b>	Static charges generated by emptying package in or near flammable vapor may cause flash fire.

---

### 6. ACCIDENTAL RELEASE MEASURES

<b>Personal precautions, protective equipment and emergency procedures</b>	Keep unnecessary personnel away. Eliminate all sources of ignition. Avoid contact with skin or inhalation of spillage, dust or vapor. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering them.
<b>Methods and materials for containment and cleaning up</b>	Eliminate all ignition sources (no smoking, flares, sparks or flames in immediate area). Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Absorb with inert absorbent such as dry clay, sand or diatomaceous earth, commercial sorbents, or recover using pumps.

The product is immiscible with water and will spread on the water surface.

Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Prevent product from entering drains. Do not allow material to contaminate ground water system. Absorb in vermiculite, dry sand or earth and place into containers.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Never return spills in original containers for re-use. This material and its container must be disposed of as hazardous waste. Collect and dispose of spillage as indicated in section 13 of the SDS.

<b>Environmental precautions</b>	Prevent further leakage or spillage if safe to do so. Do not contaminate water. Avoid release to the environment. Retain and dispose of contaminated wash water. Contact local authorities in case of spillage to drain/aquatic environment.
----------------------------------	--



## SAFETY DATA SHEET

500930 SAFRANAL

Revision Date: 05-01-2015

Page 4 of 10

Version # 01

Print Date: 11-23-2015

### 7. HANDLING AND STORAGE

<b>Precautions for safe handling</b>	Do not handle or store near an open flame, heat or other sources of ignition. Porous material such as rags, paper, insulation, or organic clay may spontaneously combust when wetted with this material. May auto-oxidize with sufficient heat generation to ignite if spread (as a thin film) or absorbed on porous or fibrous material. Take precautionary measures against static discharges. All equipment used when handling the product must be grounded. Contaminated rags and cloths must be put in fireproof containers for disposal. Avoid breathing vapor. Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. Wash thoroughly after handling.
<b>Conditions for safe storage, including any incompatibilities</b>	Do not store in direct sunlight. Keep container closed. Handle containers with care. Open slowly in order to control possible pressure release. Store in a cool, well-ventilated area. Keep under a nitrogen blanket.

### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

<b>Occupational exposure limits</b>	No exposure limits noted for ingredient(s).
<b>Biological limit values</b>	No biological exposure limits noted for the ingredient(s).
<b>Appropriate engineering controls</b>	Use explosion-proof ventilation equipment to stay below exposure limits.
<b>Individual protection measures, such as personal protective equipment</b>	
<b>Eye/face protection</b>	Wear safety glasses with side shields (or goggles). Face shield is recommended.
<b>Skin protection</b>	
<b>Hand protection</b>	Chemical resistant gloves.
<b>Other</b>	Use of an impervious apron is recommended.
<b>Respiratory protection</b>	Respiratory protection not required. If ventilation is insufficient, suitable respiratory protection must be provided.
<b>Thermal hazards</b>	Wear appropriate thermal protective clothing, when necessary.
<b>General hygiene considerations</b>	When using do not smoke. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Contaminated work clothing should not be allowed out of the workplace.

### 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance</b>	Refer to Spec Sheet
<b>Physical state</b>	Liquid.
<b>Form</b>	Liquid.
<b>Color</b>	Refer to Spec Sheet
<b>Odor</b>	Characteristic.
<b>Odor threshold</b>	Not available.
<b>pH</b>	Not available.
<b>Melting point/freezing point</b>	Not available.
<b>Initial boiling point and boiling range</b>	341.6 °F (172 °C)
<b>Flash point</b>	186.0 °F (85.6 °C) Closed Cup
<b>Evaporation rate</b>	Not available.

## SAFETY DATA SHEET

### 500930 SAFRANAL

Revision Date: 05-01-2015

Page 5 of 10

Version # 01

Print Date: 11-23-2015

Flammability (solid, gas)	Not applicable.
<b>Upper/lower flammability or explosive limits</b>	
Flammability limit - lower (%)	Not available.
Flammability limit - upper (%)	Not available.
Explosive limit - lower (%)	Not available.
Explosive limit - upper (%)	Not available.
Vapor pressure	0.13 mm Hg at 25 °C
Vapor density	5.2
Relative density	Not available.
<b>Solubility(ies)</b>	
Solubility (water)	Insoluble
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	Not available.
<b>Other information</b>	
Flammability class	Combustible IIIA estimated
Molecular formula	C10H14O
Molecular weight	150.22 g/mol
Specific gravity	0.97 at 25 °C

---

## 10. STABILITY AND REACTIVITY

Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use.
Conditions to avoid	Porous material such as rags, paper, insulation, or organic clay may spontaneously combust when wetted with this material.
Incompatible materials	Strong oxidizing agents.
Hazardous decomposition products	No hazardous decomposition products if stored and handled as indicated.

---

## 11. TOXICOLOGICAL INFORMATION

### Information on likely routes of exposure

Inhalation	No adverse effects due to inhalation are expected.
Skin contact	Causes skin irritation. May cause an allergic skin reaction.
Eye contact	Causes serious eye irritation.
Ingestion	Expected to be a low ingestion hazard.

## SAFETY DATA SHEET

### 500930 SAFRANAL

Revision Date: 05-01-2015

Page 6 of 10

Version # 01

Print Date: 11-23-2015

**Symptoms related to the physical, chemical and toxicological characteristics**

Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Skin irritation. May cause redness and pain. May cause an allergic skin reaction. Dermatitis. Rash.

**Information on toxicological effects**

**Acute toxicity**

May cause an allergic skin reaction.

**Skin corrosion/irritation**

Causes skin irritation.  
Species: guinea pig  
Skin irritation

**Serious eye damage/eye irritation**

Causes serious eye irritation.  
May cause irreversible eye damage.

**Respiratory or skin sensitization**

**Respiratory sensitization**

Not a respiratory sensitizer.

**Skin sensitization**

May cause an allergic skin reaction.  
Skin sensitization Human  
Result: Not sensitizing  
at 0.05% in dimethyl phthalate  
Maximization Test guinea pig  
Result: Strong sensitizer

Phototoxicity guinea pig  
Result: negative  
Photoallergy guinea pig  
Result: negative

**Germ cell mutagenicity**

Genotoxicity in vitro: Ames test  
negative

**Carcinogenicity**

**OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)**

Not listed.

**Reproductive toxicity**

This product is not expected to cause reproductive or developmental effects.

**Specific target organ toxicity - single exposure**

Not classified.

**Specific target organ toxicity - repeated exposure**

Not classified.

**Aspiration hazard**

Not an aspiration hazard.

## 12. ECOLOGICAL INFORMATION

**Ecotoxicity**

The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

**Persistence and degradability**

No data is available on the degradability of this product.

**Bioaccumulative potential**

No data available.

**Mobility in soil**

No data available.

**Other adverse effects**

No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

## SAFETY DATA SHEET

500930 SAFRANAL

Revision Date: 05-01-2015

Page 7 of 10

Version # 01

Print Date: 11-23-2015

---

### 13. DISPOSAL CONSIDERATIONS

<b>Disposal instructions</b>	Do not discharge into drains, water courses or onto the ground. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international regulations.
<b>Local disposal regulations</b>	Dispose in accordance with all applicable regulations.
<b>Hazardous waste code</b>	Not established.
<b>Waste from residues / unused products</b>	Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).
<b>Contaminated packaging</b>	Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied.

---

### 14. TRANSPORT INFORMATION

#### ADN

Not regulated as dangerous goods.

#### ADR

Not regulated as dangerous goods.

#### RID

Not regulated as dangerous goods.

#### DOT

##### BULK

<b>UN number</b>	NA1993
<b>Proper shipping name</b>	COMBUSTIBLE LIQUID, N.O.S. (2,6,6-TRIMETHYL-1,3- CYCLO HEXADIENYL-1 CARBALDEHYDE)
<b>Hazard class</b>	Combustible liq
<b>Packing group</b>	III
<b>Environmental hazards</b>	
<b>Marine pollutant</b>	No
<b>Packaging exceptions</b>	150
<b>Packaging bulk</b>	241
<b>Labels required</b>	None

#### DOT

##### NON-BULK

Not regulated as dangerous goods.

#### IATA

Not regulated as dangerous goods.

#### IMDG

Not regulated as dangerous goods.

## SAFETY DATA SHEET

500930 SAFRANAL

Revision Date: 05-01-2015

Page 8 of 10

Version # 01

Print Date: 11-23-2015

DOT BULK



### 15. REGULATORY INFORMATION

**US federal regulations** This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

**CERCLA Hazardous Substance List (40 CFR 302.4)**

Not listed.

**US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)**

Not listed.

**SARA 304 Emergency release notification**

Not regulated.

**OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)**

Not listed.

**TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)**

Not regulated.

**Superfund Amendments and Reauthorization Act of 1986 (SARA)**

**Hazard categories** Immediate Hazard - Yes  
Delayed Hazard - No  
Fire Hazard - Yes  
Pressure Hazard - No  
Reactivity Hazard - No

**SARA 302 Extremely hazardous substance**

Not listed.

**SARA 311/312 Hazardous chemical** Yes

**SARA 313 (TRI reporting)**  
Not regulated.

**Other federal regulations**

**Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List**

Not regulated.

**Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)**

Not regulated.

**Safe Drinking Water Act (SDWA)** Not regulated.





## SAFETY DATA SHEET

### 500930 SAFRANAL

Revision Date: 05-01-2015

Page 9 of 10

Version # 01

Print Date: 11-23-2015

#### US state regulations

##### US. Massachusetts RTK - Substance List

Not regulated.

##### US. New Jersey Worker and Community Right-to-Know Act

Not listed.

##### US. Pennsylvania Worker and Community Right-to-Know Law

Not listed.

##### US. Rhode Island RTK

Not regulated.

##### US. California Proposition 65

US - California Proposition 65 - Carcinogens & Reproductive Toxicity (CRT): Listed substance

Not listed.

#### International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Existing Chemicals List (ECL)	No
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

\*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

#### 16. OTHER INFORMATION, INCLUDING DATE OF PREPARATION OR LAST REVISION

Issue date	11-23-2015
Revision date	05-01-2015
Version #	01
HMIS® ratings	Health: 2 Flammability: 2 Physical hazard: 0



## SAFETY DATA SHEET

500930 SAFRANAL

---

Revision Date: 05-01-2015

Page 10 of 10

Version # 01

Print Date: 11-23-2015

---

**Disclaimer**

Vigon cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used. It is the user's responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use. The information in the sheet was written based on the best knowledge and experience currently available. The above information relates only to this product and not to its use in combination with any other material or any particular process and is designed only as guidance for the safe handling, use, processing, storage, transportation, disposal, and should not be considered as a guarantee or quality specification. The above information is based on data provided by and collected from recognized sources such as distributors, manufacturers, and technical groups and is considered to be accurate to the best of Vigon's knowledge as of the date of this document. It is the responsibility of the user to review all safety information about this product and determine its safety and suitability in their own processes and operations. Appropriate warnings and safe handling procedures should be provided to all handlers and users, taking into account the intended use and the specific conditions and factors relating to such use in accordance with all applicable laws and regulations.