# **Product Specification**

Product Name: NEROL 90

Vigon Code: 503580

**CAS Number:** 106-25-2

FEMA Number: 2770

VIGON

zelis

Characteristic:	Specification:	
Acid Value	0.000	0.500
Assay (sum Of Isomers)%	95.00	100.00
Citronellol%	0.00	0.15
Citral%	0.00	0.70
Density (@20c)	0.8720	0.8820
Gas Chromatograph	PASSES TEST	
Geraniol%	2.00	6.00
Linalool%	0.00	0.10
Nerol%	90.00	98.00
Odor	CHARACTERISTIC ODOR.	
Color/appearance	COLORLESS TO	) SLIGHTLY YELLOWISH LIQUID.

### **Additional Product Information:**

Flash Point: >200 °F

Shelf Life: 36 Months

Storage Conditions: Stable when stored in its original package, tightly sealed in a cool (46-90°F) and dry location out of direct heat and light.

Effective Date: November 22, 2017

#### Printed Date: July 17, 2024



## 503580 NEROL 90

Revision Date: 02-18-2020	Page 1 of 13
Version # 02	Print Date: 02-18-2020

#### **1. IDENTIFICATION Product Description:** NEROL 90 CAS# 106-25-2 2770 **FEMA Number** Other means of identification 503580 Vigon Item # Recommended use Concentrated aromatic ingredient which may be used fragrance compounds according to legal and IFRA guidelines. **Recommended restrictions** For Manufacturing Use Only Company 24 Hour Emergency Response Information INFOTRAC (ACCT# 78928); Vigon International, Inc. 1-800-535-5053 WITHIN THE U.S.A. 127 Airport Road 1-352-323-3500 OUTSIDE THE U.S.A. E. Stroudsburg, PA 18301 For information call: 570-476-6300 Web Site: www.vigon.com Manufacturer/Importer/Supplier/Distributor information Manufacturer Vigon International, Inc. Company name Address 127 Airport Road E. Stroudsburg, PA 18301 **United States** Telephone For information call: 570-476-6300 Website www.vigon.com E-mail Not available. **INFOTRAC** Emergency phone number (ACCT# 78928); 1-800-535-5053 WITHIN THE U.S.A. 1-352-323-3500 OUTSIDE THE U.S.A. 2. HAZARD(S) IDENTIFICATION

Physical hazards	Not classified.	
Health hazards	Acute toxicity, oral	Category 5
	Skin corrosion/irritation	Category 2
	Serious eye damage/eye irritation	Category 1
	Sensitization, skin	Category 1
Environmental hazards	Not classified.	

Label elements



Signal word



## 503580 NEROL 90

Revision Date: 02-18-2020	Page 2 of 13	
Version # 02	Print Date: 02-18-2020	
Hazard statement	May be harmful if swallowed. May cause an allergic skin reaction. Causes serious eye damage. Toxic to aquatic life.	
Precautionary statement		
Prevention	Contaminated work clothing should not be allowed out of the workplace. Avoid release to the environment. Wear eye protection/face protection. Wear protective gloves.	
Response	IF ON SKIN: Wash with plenty of water. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/doctor. If skin irritation or rash occurs: Get medical advice/attention. Take off contaminated clothing and wash it before reuse.	
Storage	Store away from incompatible materials.	
Disposal	Dispose of contents/container in accordance with local/regional/national/international regulations.	
Hazard(s) not otherwise classified (HNOC)	None known.	
Supplemental information	100% of the substance consists of component(s) of unknown acute inhalation toxicity.	

#### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substances

Cubblances			
Chemical name	Common name and synonyms	CAS number	%
NEROL		106-25-2	100
Additional components			
Chemical name	Common name and synonyms	CAS number	%
CITRAL	2,6- OCTADIENAL, 3,7-DIMETHYL- 2,6- dimethyl octadien-2,6-al-8 3,7-DIMETHYL-2,6-OCTADIENAL 3,7- dimethylocta-2,6-dienal	5392-40-5	
CITRONELLOL	3,7-DIMETHYL-6-OCTEN-1-OL 6-Octen-1-ol, 3,7-dimethyl- 2,6- dimethyl-2-octen-8-ol	106-22-9	
GERANIOL	3,7-DIMETHYL-2,6-OCTADIEN-1-OL (2E)-3,7- dimethylocta-2,6-dien-1-ol LEMONOL GERANYL ALCOHOL	106-24-1	
Composition comments	<ul> <li>Description: Nerol [(2Z)-3,7-dimethylocta-2,6-dien-1-ol]</li> <li>Geraniol is present as an impurity at 6% maximum. Citronellol and citral may also be present (max 0.3% and 0.7% resp.).</li> </ul>		
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.		



## 503580 NEROL 90

Revision Date: 02-18-2020 Page 3 of 13	
Version # 02	Print Date: 02-18-2020
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. Permanent eye damage including blindness could result. May cause an allergic skin reaction. Dermatitis. Rash.
Indication of immediate medical attention and special treatment needed	Not available.

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.

### **5. FIRE-FIGHTING MEASURES**

General information

Suitable extinguishing media	Water spray, fog, CO2, dry chemical, or alcohol resistant foam.
Unsuitable extinguishing media	Do not use a solid water stream as it may scatter and spread fire.
Specific hazards arising from the chemical	Fire may produce irritating, corrosive and/or toxic gases.
Special protective equipment and precautions for firefighters	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.
Fire fighting equipment/instructions	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.
Specific methods	Use water spray to cool unopened containers.
General fire hazards	Static charges generated by emptying package in or near flammable vapor may cause flash fire.

#### 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective<br/>equipment and emergency<br/>proceduresEliminate all sources of ignition. Avoid contact with skin or inhalation of spillage, dust or vapor.<br/>Keep unnecessary personnel away. Do not touch damaged containers or spilled material unless<br/>wearing appropriate protective clothing. Ventilate closed spaces before entering them.



## 503580 NEROL 90

Revision Date: 02-18-2020	Page 4 of 13 Print Date: 02-18-2020	
Version # 02		
Methods and materials for containment and cleaning up	Collect and dispose of spillage as indicated in section 13 of the SDS.	
	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.	
	Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible.	
	Never return spills in original containers for re-use. This material and its container must be disposed of as hazardous waste. Eliminate all ignition sources (no smoking, flares, sparks or flames in immediate area). Prevent product from entering drains.	
	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. 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.	
Environmental precautions	Retain and dispose of contaminated wash water. Avoid release to the environment. Contact local authorities in case of spillage to drain/aquatic environment. Prevent further leakage or spillage if safe to do so. Do not contaminate water.	
7. HANDLING AND STOR	AGE	
Precautions for safe handling	Do not handle or store near an open flame, heat or other sources of ignition. Take precautionary measures against static discharges. All equipment used when handling the product must be	

grounded. Avoid breathing vapor. Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. Wash thoroughly after handling.

Conditions for safe storage,<br/>including any incompatibilitiesKeep container closed. Handle containers with care. Open slowly in order to control possible<br/>pressure release. Store in a cool, well-ventilated area.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

#### Occupational exposure limits

US. ACGIH Threshold Limit Values			
Additional components	Туре	Value	Form
CITRAL (CAS 5392-40-5)	TWA	5 ppm	Inhalable fraction and vapor.

#### **Biological limit values**

No biological exposure limits noted for the ingredient(s).



## 503580 NEROL 90

Revision Date: 02-18-2020	Page 5 of 13	
Version # 02	Print Date: 02-18-2020	
Exposure guidelines	<ul> <li>Components with limit values that require monitoring at the workplace: None</li> <li>DNELs</li> <li>DNEL (Derived No-Effect Level): Workers - Long-term exposure</li> <li>Systemic effects – inhalation: 5.4 mg/m<sup>3</sup></li> <li>Systemic effects – dermal: 0.76 mg/kg bw/day</li> <li>Local effects – dermal: 133 μg/cm<sup>2</sup></li> </ul>	
	<ul> <li>DNEL (Derived No-Effect Level): General population - Long-term exposure Systemic effects – inhalation: 1.3 mg/m<sup>3</sup></li> <li>Systemic effects – dermal: 0.38 mg/kg bw/day</li> <li>Systemic effects – oral: 0.38 mg/kg bw/day</li> <li>PNECs</li> <li>PNEC (Predicted No-Effect Concentration) aqua (freshwater): 7.45 µg/L</li> </ul>	
	<ul> <li>PNEC (Predicted No-Effect Concentration) aqua (marine water): 0.745 µg/L</li> <li>PNEC (Predicted No-Effect Concentration) Sewage Treatment Plant: 12.9 mg/L</li> <li>PNEC (Predicted No-Effect Concentration) sediment (freshwater): 133 µg/kg sediment dw</li> <li>PNEC (Predicted No-Effect Concentration) sediment (marine water): 13.3 µg/kg sediment dw</li> <li>PNEC (Predicted No-Effect Concentration) soil: 22.3 µg/kg soil dw</li> <li>PNEC (Predicted No-Effect Concentration) aqua (intermittent releases): 74.5 µg/L</li> <li>Additional information: This sheet is based on the current valid lists.</li> </ul>	
US ACGIH Threshold Limit Va	alues: Skin designation	
CITRAL (CAS 5392-40-5)	-	
Appropriate engineering controls	Use explosion-proof ventilation equipment to stay below exposure limits. Adequate ventilation should be provided so that exposure limits are not exceeded.	
Individual protection measures, su Eye/face protection	<b>ch as personal protective equipment</b> Wear safety glasses with side shields (or goggles). Face shield is recommended.	
Skin protection Hand protection	Chemical resistant gloves.	
Other	Use of an impervious apron is recommended.	
Respiratory protection	Respiratory protection not required. If ventilation is insufficient, suitable respiratory protection must be provided.	
Thermal hazards	Wear appropriate thermal protective clothing, when necessary.	
General hygiene considerations	Keep away from food and drink. 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

Appearance	Refer to Spec Sheet
Physical state	Liquid.
Form	Liquid.
Color	Refer to Spec Sheet
Odor	Characteristic.
Odor threshold	Not available.
рН	Not available.



## 503580 NEROL 90

Revision Date: 02-18-2020		Page 6 of 13
Version # 02		Print Date: 02-18-2020
Melting point/freezing point	-4 °F (-20 °C)	
Initial boiling point and boiling range	433.4 °F (223 °C)	
Flash point	> 200.0 °F (> 93.3 °C) Closed Cup	
Evaporation rate	Not available.	
Flammability (solid, gas)	Not applicable.	
Upper/lower flammability or explo	osive limits	
Flammability limit - lower (%)	Not available.	
Flammability limit - upper (%)	Not available.	
Explosive limit - lower (%)	Not available.	
Explosive limit - upper (%)	Not available.	
Vapor pressure	0.6 hPa at 20 ℃ 1.1 hPa at 30 ℃ 3.2 hPa at 50 ℃	
Vapor density	Not available.	
Relative density	0.88 at 20 °C	
Solubility(ies)		
Solubility (water)	Insoluble	
Partition coefficient (n-octanol/water)	log Kow = 2.76 (30°C)	
Auto-ignition temperature	Not available.	
Decomposition temperature	Not available.	
Viscosity	4.5 mPa⋅s Dynamic: (40°C - shear rate 583 s-1) 6.39 mPa⋅s Kinematic: at 25 °C 8.9 mPa⋅s Dynamic: (20°C - shear rate 583 s-1)	
Other information		
Explosive properties	Not explosive.	
Flammability class	Combustible IIIA estimated	
Molecular formula	C10H18O	
Molecular weight	154.25 g/mol 154.25 g/mol	
Oxidizing properties	Not oxidizing.	

## **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	Avoid temperatures exceeding the flash point. Contact with incompatible materials.



## 503580 NEROL 90

Revision Date: 02-18-2020		Page 7 of 13	
Version # 02		Print Date: 02-18-2020	
Incompatible materials	Strong oxidizing agents.		
Hazardous decomposition	No hazardous decomposition pro	oducts if stored and handled as indicated.	
products			
11. TOXICOLOGICAL INF	ORMATION		
nformation on likely routes of ex	-		
Inhalation	Knowledge about health hazard i	is incomplete.	
Skin contact	May cause an allergic skin reaction	on.	
Eye contact	Causes serious eye damage.		
Ingestion	May be harmful if swallowed.		
Symptoms related to the physical, chemical and toxicological characteristics		may include stinging, tearing, redness, swelling, and blurred ncluding blindness could result. May cause an allergic skin	
Information on toxicological effect	ts		
Acute toxicity	-	May be harmful if swallowed. The oral study was carried out according to a method similar to OECD Guideline No. 401. The dermal study was carried out according to a method similar to OECD Guideline No. 402.	
Product	Species	Test Results	
NEROL (CAS 106-25-2)			
Acute			
Dermal			
LD50	Rabbit	> 5000 mg/kg	
Oral			
LD50	Rat	4500 mg/kg	
Additional components	Species	Test Results	
CITRAL (CAS 5392-40-5)			
Acute			
Dermal			
LD50	Rabbit	2250 mg/kg	
CITRONELLOL (CAS 106-22-9)			
Acute			
Dermal			
LD50	Rabbit	2650 mg/kg	
Oral			
LD50	Rat	3450 mg/kg	
Skin corrosion/irritation		f data the classification is not possible. irritation - category 2) as it was found irritant in a skin irritation ding to OECD Guideline No. 404.	



# 503580 NEROL 90

Revision Date: 02-18-2020	Page 8 of 13	
Version # 02	Print Date: 02-18-2020	
Serious eye damage/eye irritation	Causes serious eye damage. The substance is classified corrosive to the eyes (effects on the eye - category 1) as it c more than 3% of geraniol (max 6%). Geraniol was found corrosive in a study conducted in rabbits according to Guideline No. Nerol was found irritant in an eye irritation study conducted in rabbits according to a met equivalent to OECD Guideline No. 405.	. 404.
Respiratory or skin sensitization		
ACGIH sensitization		
CITRAL, INHALABLE (CAS 5392-40-5)	FRACTION AND VAPOR Dermal sensitization	
Respiratory sensitization	Due to partial or complete lack of data the classification is not possible.	
Skin sensitization	May cause an allergic skin reaction. Nerol is classified skin sensitiser category 1B as skin sensitisation effects were observer murine Local Lymph Node Assay (LLNA - OECD 429). The product contains other skin sensitisers present as impurities: geraniol, citronellol an	
Germ cell mutagenicity	<ul> <li>Based on the results of the tests conducted with the substance, no genotoxic potential is</li> <li>nerol was not mutagenic in bacteria in an Ames test (OECD 471);</li> <li>no effects were observed with the substance in an in vitro chromosome aberration test lymphocytes (OECD 473);</li> <li>the substance was not mutagenic in an in vitro gene mutation test in mouse lymphoma cells (OECD 476). Due to partial or complete lack of data the classification is not possible</li> </ul>	t in human a L5178Y
Carcinogenicity	Due to partial or complete lack of data the classification is not possible. The product is not expected to be carcinogenic: no mutagenic effects were observed wit substance and there is no evidence from the repeated dose toxicity study that the substa able to induce hyperplasia or pre-neoplastic lesions.	
IARC Monographs. Overal	Evaluation of Carcinogenicity	
Not listed. OSHA Specifically Regula	ed Substances (29 CFR 1910.1001-1053)	
	ogram (NTP) Report on Carcinogens	
Not listed.		
Reproductive toxicity	<ul> <li>Due to partial or complete lack of data the classification is not possible.</li> <li>The effects observed in a reproduction/developmental toxicity screening test conducted according to OECD guideline No 422 (test combined with a repeated dose toxicity study result in classification of nerol.</li> <li>No treatment-related effects were actually detected in mating performance, fertility and g length. An increase in post-implantation losses was observed but it was associated with food consumption by gestating females and a decrease in their bodyweight gain.</li> <li>A further study has been proposed within the context of REACH in order to confirm the non-classification of the substance.</li> <li>NOAEL - reproduction toxicity = 720 mg/kg bw/day.</li> <li>NOAEL - developmental toxicity = 374 mg/kg bw/day.</li> <li>NOAEL (No Observed Adverse Effect Level) - systemic toxicity for males and females (fmg/kg bw/day.</li> </ul>	/) do not gestation a reduced



## 503580 NEROL 90

Revision Date: 02-18-2020	Page 9 of 13
Version # 02 Print Date: 02-18-2020	
Specific target organ toxicity - single exposure	Due to partial or complete lack of data the classification is not possible. The substance is not classified according to the limited effects observed in LD50 determination studies.
Specific target organ toxicity - repeated exposure	Due to partial or complete lack of data the classification is not possible. The effects observed in a repeated dose toxicity study (28 days) do not result in classification of nerol. This study - combined with a reproduction/developmental toxicity screening test - was conducted according to OECD guideline No 422.

Daily administration of the substance by diet for 42 days to male and unmated female rats was<br/>well tolerated at doses of 191.2 and 374 mg/kg bw/day.<br/>At 720 mg/kg bw/day a decrease in food consumption and bodyweight gain of animals was<br/>observed as well as microscopic abnormalities in liver and kidneys.<br/>However, kidney effects are not considered as relevant for humans.<br/>NOAEL = 374 mg/kg bw/day (effects on liver).Aspiration hazardDue to partial or complete lack of data the classification is not possible.<br/>Although the substance is a low viscosity and mobile liquid, there is no evidence of aspiration<br/>toxicity for this material from either human experience or from animal toxicity data and it is not a<br/>member of a recognized category of materials having aspiration toxicity potential (i.e.<br/>hydrocarbons).

### **12. ECOLOGICAL INFORMATION**

cotoxicity	Toxic to a	iquatic life.	
Product		Species	Test Results
NEROL (CAS 106-25-2)			
Acute			
Algae	EC50	Green algea (Pseudokirchneriella subcapitata)	9.54 mg/l, 72 hours (based on growth rate - nominal concentration – OECD 201 Guideline).
			2.15 mg/l, 72 hours (based on biomass - nominal concentration – OECD 201 Guideline).
Other	EC50	Activated sludge of a predominantly domestic sewage	241 mg/l, 3 hours (respiration rate - nominal concentration - activated sludge - OECD 209).
Aquatic			
Acute			
Crustacea	EC50	Daphnia magna	32.4 mg/l, 48 hours (nominal concentration - OECD 202 Guideline).
Fish	LC50	Danio rerio	20.3 mg/l, 96 hours (nominal concentration - OECD 203 Guideline).



# 503580 NEROL 90

Revision Date: 02-18-2020	Page 10 of 13
Version # 02	Print Date: 02-18-2020

dditional components	3	Species	Test Results
CITRAL (CAS 5392-40	)-5)		
Acute			
Other	EC20	Activated sludge of a predominantly domestic sewage	68 mg/l, 0.5 hours OECD Guideline 209 aquatic
Aquatic			
Other	EC50	Bacterium	2100 mg/l, 0.5 hours DIN 38412 Part 27 (draft) aquatic - The product has low solubility in the test medium. An aqueous solution prepared with solubilizers has been tested. The details of the toxic effect relate to the nominal concentration.
Acute			
Algae	EC50	Green algae (Chlamydomonas variabilis)	103.8 mg/l, 72 hours DIN 38412 Part 9 static - The product has low solubility in the test medium. An aqueous solution prepared with solubilizers has been tested. The details of the toxic effect relate to the nominal concentration.
Crustacea	EC50	Daphnia magna	7 mg/l, 48 hours Directive 79/831/EEC static - The product has low solubility in the test medium. An aqueous solution prepared with solubilizers has been tested. The details of the toxic effect relate to the nominal concentration.
Fish	LC50	lde, silver or golden orfe (Leuciscus idus)	> 4.6 - < 10 mg/l, 96 hours DIN 38415 Part 15 static - The product has low solubility in the test medium. An aqueous solution prepared with solubilizers has been tested. The details of the toxic effect relate to the nominal concentration.
ITRONELLOL (CAS	106-22-9)		
Aquatic	· · · /		
Acute			
Algae	EC50	Algae	2.4 mg/l, 72 hours
Crustacea	EC50	Daphnia	17 mg/l, 48 hours
Fish	LC50	Leuciscus idus (Golden orfe)	> 10 - < 22 mg/l, 96 hours
ERANIOL (CAS 106-	-24-1)		
Other	EC50	Activated sludge of a predominantly domestic sewage	70 mg/l, 0.5 hours



## 503580 NEROL 90

Revision Date: 02-18-2020	Page 11 of 13
Version # 02	Print Date: 02-18-2020

Additional components		Species	Test Results
Aquatic			
Algae	EC50	Green algae (Desmodesmus subspicatus)	13.1 mg/l, 72 hours
Crustacea	EC50	Daphnia magna	10.8 mg/l, 48 hours
Fish	LC50	Danio rerio	22 mg/l, 96 hours
		Rainbow trout,donaldson trout (Oncorhynchus mykiss)	> 3.3 - < 4.1 mg/l, 96 hours
Persistence and degradability	Biodegrad the OECI adapted). Note: afte According	0 301D guideline - activated sludge from a	
Biodegradability			
Percent degradation (A	erobic biodeg	-	
GERANIOL			A (new version)(aerobic), activatied OC reduction, Readily biodegradable D criteria)
Bioaccumulative potential	(Quantita coefficien		Based on estimations using 3 different QSARs ds) and on the value of the substance partition n
Mobility in soil	No data a	vailable.	
Other adverse effects		adverse environmental effects (e.g. ozone endocrine disruption, global warming pote	e depletion, photochemical ozone creation ential) are expected from this component.
13. DISPOSAL CONSIDE	RATIONS		
Disposal instructions	into sewe used cont	-	the ground. Do not allow this material to drain nds, waterways or ditches with chemical or cordance with
Local disposal regulations	Dispose i	n accordance with all applicable regulation	ns.
Hazardous waste code	Not estab	lished.	
Waste from residues / unused	Empty co	ntainers or liners may retain some produc	t residues. This material and its container must

 waste from residues / unused
 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).

 Contaminated packaging
 Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or

### **14. TRANSPORT INFORMATION**

disposal.

Not regulated as dangerous goods.



## 503580 NEROL 90

Revision Date: 02-18-2020 Version # 02 Page 12 of 13 Print Date: 02-18-2020

#### ADR

Not regulated as dangerous goods.

#### RID

Not regulated as dangerous goods.

#### DOT

#### BULK

Not regulated as dangerous goods.

#### DOT

#### NON-BULK

Not regulated as dangerous goods.

#### IATA

Not regulated as dangerous goods.

#### IMDG

Not regulated as dangerous goods.

#### **15. REGULATORY INFORMATION**

**US federal regulations** This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200. Toxic Substances Control Act (TSCA) TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D) Not regulated. CERCLA Hazardous Substance List (40 CFR 302.4) Not listed. SARA 304 Emergency release notification Not regulated. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053) Not listed. Superfund Amendments and Reauthorization Act of 1986 (SARA) SARA 302 Extremely hazardous substance Not listed. SARA 311/312 Hazardous Yes chemical Classified hazard Serious eye damage or eye irritation Respiratory or skin sensitization categories SARA 313 (TRI reporting) Not regulated. Other federal regulations Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List Not regulated.



## 503580 NEROL 90

Revision Date: 02-18-2020 Version # 02 Page 13 of 13 Print Date: 02-18-2020

Not regulated.	
Safe Drinking Water Act (SDWA)	Not regulated.
16. OTHER INFORMATIO	N, INCLUDING DATE OF PREPARATION OR LAST REVISION
Issue date	11-21-2015
Revision date	02-18-2020
Version #	02
HMIS® ratings	Health: 3 Flammability: 1 Physical hazard: 0
Disclaimer	Vigon International, Inc. 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, and disposal and should not be considered as a guarantee or quality specification. This product has not been evaluated for safe use in e-cigarettes or any vaping application where the product(s) is/are intentionally vaporized and inhaled. Vigon International, Inc. has performed no testing on these products in e-cig/vaping applications. It is the sole responsibility of the individual(s) purchasing 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 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 documet. It is the responsibility of the user to review all safety information about this product and de
Revision information	This document has undergone significant changes and should be reviewed in its entirety.





Vigon Code: 503580

FEMA #: 2770

Vigon International, LLC. certifies that the above ingredient is **<u>not</u>** food grade.

Vigon International, LCC. may terminate this certification at any time upon written notice in which this certification shall be null and void as to any material supplied after termination of the certification.

Sincerely,



#### Vigon Code: 503580

\* A check mark () indicates the Allergen/Sensitive Agent is present. If blank it means that there is no Allergen/Sensitive present.

ALLERGEN/SENSITIVE AGENTS	*
CORN & CORN PRODUCTS	
Includes modified starch, hydrolyzed protein, sweeteners, sugars, spice carriers	
EGG & EGG PRODUCTS	
liquid and powders	
FISH	
Includes any and all species of fresh and salt water fish	
GARLIC	
Dehydrated, powdered, granules, and flakes	
GLUTEN	
Wheat, rye, barley, oats, flour, etc.	
MILK & DAIRY PRODUCTS	
Includes whey, lactose, cheese, casein, spice carriers, milk, cream, etc.	
MONOSODIUM GLUTAMATE	
PEANUTS, PEANUT OIL & PEANUT DERIVED ITEMS	
Peanut meal, flour & ground nuts, szechwan sauce, mandelona nuts, etc.	
SESAME SEEDS & SESAME OIL	
CRUSTACEANS	
Shrimp, lobster, rock lobster, crab, crayfish, and products made from them	
MOLLUSKS	
Clams, mussels, oysters, scallops, and products made from them	
SOY	
Includes soya powder, protein, oil, lecithin, tofu	
SULFITES	
Includes sulfur dioxide, sodium dithionite, chemicals that lists sulfite, etc.	
TREE NUTS	
Includes almonds, beechnuts, bazil nuts, nutmeg, cashews, chestnuts, etc.	
WHEAT	
Includes hydrolyzed wheat protein, flour, gluten flour, starches	
MUSTARD & MUSTARD OIL	
LUPIN	
CELERY	

Vigon International, LLC. follows Good Manufacturing Practices and has implemented HACCP systems. Our personnel are trained on the proper handling of allergenic materials.

Sincerely,

Vigon Regulatory Department regulatory@vigon.com Date of Issue: July 17, 2024

127 Airport Road East Stroudsburg, PA 18301-9629 USA | Tel: +1 570-476-6300 | Fax: +1 570-476-1110 | Email: regulatory@vigon.com | Web: vigon.com



Vigon Code: 503580

Vigon International, LLC. declares that the product listed above is not derived from or produced using genetically modified organisms or their derivatives.

Sincerely,

## **Ingredient Statement**



Vigon Code: 503580

CAS #: 106-25-2

(2Z)-3,7-dimethylocta-2,6-dien-1-ol

100%

VIGON

azelis

Sincerely,



Vigon Code: 503580

Vigon International, LLC. declares that the product listed above has <u>not</u> been:

- a) Exposed to Ionizing Radiation
- b) Derived from Sewage Sludge
- c) Treated with Ethyl Oxide

Vigon International, LLC. may terminate this statement at any time upon written notice in which this statement shall be null and void as to any material supplied after termination of the statement.

Sincerely,



Vigon Code: 503580

Vigon International, LLC. declares that, to the best of our knowledge and belief, all ingredients in the product listed above are listed as being generally recognized as safe (GRAS) by the Food and Drug administration (FDA) when used in accordance with the FDA's good manufacturing practices (GMP) and contain no residues of heavy metals and pesticides in excess of tolerances set by the FDA and the Environmental Protection Agency (EPA).

Sincerely,



Vigon Code: 503580

Vigon International, LLC. declares that, to the best of our knowledge that the product listed above has not been treated with BHT, BHA, Tocopherols or any other stabilizer.

Vigon International, LLC. may terminate this statement at any time upon written notice in which this statement shall be null and void as to any material supplied after termination of the statement.

Sincerely,



#### Vigon Code: 503580

In accordance with the regulations promulgated under the Federal Food, Drug, and Cosmetic Act, Vigon International, LLC. hereby provides continuing guarantee for the item listed above.

The article(s) comprising each shipment or other delivery hereafter made by Vigon International, LLC. is hereby guaranteed, as of the date of shipment or delivery, to be, on such date, not adulterated or misbranded within the meaning of the Federal Food, Drug, and Cosmetic Act, and not an article which may not, under the provisions of section 404, 505, or 512 of the act, be introduced into interstate commerce.

The guarantee herein given shall be a continuing guarantee and shall remain in full force and effect until revoked in writing by the undersigned. This guarantee shall not limit or preclude the operation and effect of any and all provisions of any agreement(s) under which the articles covered by this guarantee are sold, and the provisions of such agreement(s) shall govern in the event of any conflict or inconsistency herewith. Supplier's liability for breach of this guarantee shall in no event exceed the value of such of the articles of the supplier shipped to or on the order of Purchaser hereunder as may fail to comply with this guarantee.

This guarantee shall be void and of no effect in any instance where the particular use by Purchaser of any article to which this guarantee would otherwise apply is a use which is not in accordance with the requirements of the Federal Food, Drug and Cosmetic Act. Any and all prior guarantees and/or indemnity agreements heretofore given by supplier, are hereby revoked.

Sincerely,



### Vigon Code: 503580

### Vigon International, LLC. certifies that the product listed above is suitable for consumption by:

Vegans Do not eat meat, poultry, fish/seafood,eggs,dairy products, honey	
Lacto-Vegetarians Do not eat meat, poultry, fish/seafood, eggs, but do eat dairy products	
<b>Ovo-Vegetarians</b> Do not eat meat, poultry, fish/seafood, dairy products, but do eat eggs	
Vegetarians Do not eat meat, poultry, fish/seafood, but do eat dairy products and eggs	

Sincerely,



Vigon Code: 503580

Vigon International, LLC. is not in the practice of performing or commissioning animal testing on its finished products and actively evaluates the ingredients of its products through non-animal testing methods and through computational (predictive) toxicology programs.

Sincerely,

## Nanomaterials



#### Product Name: NEROL 90

#### Vigon Code: 503580

We hereby confirm, to the best of our knowledge, that the above referenced product has not been formulated with engineered nanomaterials.

"Engineered nanomaterial" means any intentionally producted material that has one or more dimensions of the order of 100 nm or less or that is composed of discrete functional parts, either internally or at the surface, many of which have one or more dimensions of the order of 100 nm or less, including structures, agglomerates or aggregates, which may have a size above the order of 100nm but retain properties that are characteristic of the nanoscale.

Sincerely,

#### Vigon Code: 503580

Vigon International, LLC. products are manufactured wholly from synthetic, natural or manufactured materials and do not contain any raw materials produced from or substances derived of animal origin. Moreover, these products do not contain, and are not derived from, specified risk material as defined in Commission Decision 97/534/EC or mechanically recovered meat obtained from the vertebral column of bovine, ovine or caprine animals.

The manufacturing process does not use any ingredient of animal origin nor do our products come in contact with animal products during storage and transportation.

We further declare that our products are Dioxin Free.

Therefore, to the best of our knowledge the product listed above are free from Transmissible Spongiform Encephalopathy (TSE) and Bovine Spongiform Encephalopathy (BSE).

Vigon International, LLC. may terminate this statement at any time upon written notice, in which this statement shall be null and void as to any material supplied after termination of the statement.

Sincerely,



Vigon Code: 503580

We certify that the above material contains the following restricted substance restricted by IFRA Standards:

Geraniol (CAS 106-24-1) 2.6% Citronellol (CAS 106-22-9) 0.15% Linalool (CAS 78-70-6) 0.1%

- is in compliance with the Standards of the INTERNATIONAL FRAGRANCE ASSOCIATION (IFRA 51st amendment), depending on the application and the percentage of use in the final product.

The IFRA Standards regarding use restriction are based on safety assessments by the Panel of Experts of the Research Institute for Fragrance Materials (RIFM) and are enforced by the IFRA Scientific Committee.

It is the ultimate responsibility of our customer to ensure the safety of the final product by further testing if need be.



### Vigon Code: 503580

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

Sincerely,

Vigon Regulatory Department regulatory@vigon.com Date of Issue: July 17, 2024



## **Residual Solvents**

azelis VIGON

#### Product Name: NEROL 90

### Vigon Code: 503580

Based on our knowledge of our production process, raw materials and equipments used we do not expect residual solvents to be present.

Sincerely,



Vigon Code: 503580

The product listed above contains the following substances listen in European Directive 76/768/EEC established by the SCCNFP declared allergens.

Geraniol (CAS 106-24-1) 2.6% Citronellol (CAS 106-22-9) 0.15% Linalool (CAS 78-70-6) 0.1%

Sincerely,

## **Melamine Statement**



Product Name: NEROL 90

Vigon Code: 503580

Based on our knowledge of our production process, raw materials and equipment used we do not expect melamine to be present.

Sincerely,

## **Phthalate Statement**



Product Name: NEROL 90

Vigon Code: 503580

We've performed a risk assessment on our product contact plastics which include tubes, joints, caps, pumps, as well as packaging (e.g. plastic wraps and bags) and can confirm that our plastic products do not contain certain phthalate esters (most notably bis-2-Ethylhexyl phthalate[DEHP] and dibutyl phthalate [DBP]).

Sincerely,