

# SAFETY DATA SHEET

## 502887 ORANGE POWER GIVCO 229

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### 1. IDENTIFICATION

<b>Product Description:</b>	<b>ORANGE POWER GIVCO 229</b>
<b>CAS #</b>	MIXTURE
<b>Other means of identification</b>	
<b>Vigon Item #</b>	502887
<b>Recommended use</b>	Concentrated aromatic ingredient which may be used fragrance compounds according to legal and IFRA guidelines.
<b>Recommended restrictions</b>	For Manufacturing Use Only
<u>Company</u>	<u>24 Hour Emergency Response Information</u>
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>	Hazardous to the aquatic environment, acute hazard	Category 2
	Hazardous to the aquatic environment, long-term hazard	Category 2

#### Label elements



**Signal word** Warning

#### Hazard statement

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.
H401	Toxic to aquatic life.
H411	Toxic to aquatic life with long lasting effects.

#### Precautionary statement

##### Prevention

P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.

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P261	Avoid breathing mist or vapor.
P264	Wash thoroughly after handling.
P272	Contaminated work clothing should not be allowed out of the workplace.
P273	Avoid release to the environment.
P280	Wear protective gloves/eye protection/face protection.

**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.
P391	Collect spillage.

**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)**

None known.

**Supplemental information**

54.05% of the mixture consists of component(s) of unknown acute hazards to the aquatic environment. 59% of the mixture consists of component(s) of unknown long-term hazards to the aquatic environment.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

**Mixtures**

Chemical name	Common name and synonyms	CAS number	%
ALCOHOLS			1 - < 41
ALIPHATIC ALDEHYDES			1 - < 20
ALIPHATIC ESTERS			1 - < 10
ALIPHATIC KETONES			1 - < 10
AROMATIC ALDEHYDES			1 - < 10
CARVENE	DIPENTENE (+)-P-MENTHA-1,8-DIENE (R)-(+)-Limonene (R)-4-Isopropenyl-1-methyl-1-cyclohexene 1- methyl-4-prop-1-en-2-ylcyclohexene	5989-27-5	1 - < 10
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	1 - < 10

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Chemical name	Common name and synonyms	CAS number	%
ESSENTIAL OILS, EXTRACTS, RESINS			1 - < 10
GERANYL ACETATE	geranyl ethanoate 2,6-DIMETHYL-2,6-OCTADIENE-8-YL ACETATE 3,7-DIMETHYL-2-TRANS-6-OCTADIENYL ACETATE [(2E)-3,7- dimethylocta-2,6-dienyl] acetate	105-87-3	1 - < 10
ISOPROPYLPHENYLBUTANAL	3-(3- propan-2-ylphenyl)butanal BENZENEPROPANAL,BETA-METHYL-3-(1- METHYLETHYL) BETA-METHYL-3-(1-METHYLETHYL)-BEN ZENEPROPANAL	125109-85-5	1 - < 10
LAURIC ALDEHYDE	Dodecanal LAURYL ALDEHYDE	112-54-9	1 - < 10
CITRONELLAL	3,7-dimethyloct-6-enal 2,3- dihydrocitral 6-Octenal, 3,7-dimethyl- RHODINAL	106-23-0	0.1 < 1
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	0.1 < 1
TERPINOLENE	cyclohexene, 1-methyl-4-(1-methylethylidene)- 1-METHYL-4-PROPAN-2-YLIDENE CYCLOHEXENE p- menth-1,4,8-diene P- METH-1-EN-8-YL-FORMATE 4-iso propylidene-1-methyl cylohexene	586-62-9	0.1 < 1
Other components below reportable levels			10 - < 20

#### 4. FIRST-AID MEASURES

<b>Inhalation</b>	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.
<b>Skin contact</b>	Take off immediately all contaminated clothing. Get medical attention if irritation develops and persists. Wash skin thoroughly with soap and water for several minutes.
<b>Eye contact</b>	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.
<b>Ingestion</b>	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.
<b>Most important symptoms/effects, acute and delayed</b>	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.



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**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.

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### 5. FIRE-FIGHTING MEASURES

**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.

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### 6. ACCIDENTAL RELEASE MEASURES

**Personal precautions, protective equipment and emergency procedures**

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.

**Methods and materials for containment and cleaning up**

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.



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**Environmental precautions** 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.

## 7. HANDLING AND STORAGE

**Precautions for safe handling** Do not handle or store near an open flame, heat or other sources of ignition. All equipment used when handling the product must be grounded. Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. Wash thoroughly after handling. Take precautionary measures against static discharges. Avoid breathing vapor.

**Conditions for safe storage, including any incompatibilities** Keep container closed. Handle containers with care. Open slowly in order to control possible pressure release. Store in a cool, well-ventilated area.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Occupational exposure limits

#### US. ACGIH Threshold Limit Values

Components	Type	Value	Form
CITRAL (CAS 5392-40-5)	TWA	5 ppm	Inhalable fraction and vapor.

#### US. Workplace Environmental Exposure Level (WEEL) Guides

Components	Type	Value
CARVENE (CAS 5989-27-5)	TWA	165.5 mg/m <sup>3</sup>
		30 ppm

**Biological limit values** No biological exposure limits noted for the ingredient(s).

### Exposure guidelines

#### US ACGIH Threshold Limit Values: Skin designation

CITRAL (CAS 5392-40-5) Can be absorbed through the skin.

**Appropriate engineering controls** Use explosion-proof ventilation equipment to stay below exposure limits. Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

### Individual protection measures, such as personal protective equipment

**Eye/face protection** 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.

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**General hygiene considerations**      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>	Not available.
<b>Flash point</b>	167.0 °F (75.0 °C) Closed Cup
<b>Evaporation rate</b>	Not available.
<b>Flammability (solid, gas)</b>	Not applicable.
<b>Upper/lower flammability or explosive limits</b>	
<b>Flammability limit - lower (%)</b>	Not available.
<b>Flammability limit - upper (%)</b>	Not available.
<b>Explosive limit - lower (%)</b>	Not available.
<b>Explosive limit - upper (%)</b>	Not available.
<b>Vapor pressure</b>	0.38 hPa at 20 °C Calculated (99.5 %)
<b>Vapor density</b>	Not available.
<b>Relative density</b>	Not available.
<b>Solubility(ies)</b>	
<b>Solubility (water)</b>	Insoluble
<b>Partition coefficient (n-octanol/water)</b>	Not available.
<b>Auto-ignition temperature</b>	Not available.
<b>Decomposition temperature</b>	Not available.
<b>Viscosity</b>	Not available.
<b>Other information</b>	
<b>Density</b>	886.97 kg/m <sup>3</sup>
<b>Flammability class</b>	Combustible IIIA estimated
<b>Molecular formula</b>	Not applicable
<b>Specific gravity</b>	0.89 at 25 °C

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#### 10. STABILITY AND REACTIVITY

<b>Reactivity</b>	The product is stable and non-reactive under normal conditions of use, storage and transport.
<b>Chemical stability</b>	Material is stable under normal conditions.
<b>Possibility of hazardous reactions</b>	No dangerous reaction known under conditions of normal use.
<b>Conditions to avoid</b>	Avoid heat, sparks, open flames and other ignition sources. Avoid temperatures exceeding the flash point. Contact with incompatible materials.
<b>Incompatible materials</b>	Strong oxidizing agents.
<b>Hazardous decomposition products</b>	No hazardous decomposition products if stored and handled as indicated.

#### 11. TOXICOLOGICAL INFORMATION

##### Information on likely routes of exposure

<b>Inhalation</b>	Prolonged inhalation may be harmful.
<b>Skin contact</b>	Causes skin irritation. May cause an allergic skin reaction.
<b>Eye contact</b>	Causes serious eye irritation. Causes mild eye irritation.
<b>Ingestion</b>	Expected to be a low ingestion hazard.

**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.

Product	Species	Test Results
ORANGE POWER GIVCO 229		
<b>Acute</b>		
<i>Oral</i>		> 5000 mg/kg ATE

Components	Species	Test Results
CARVENE (CAS 5989-27-5)		
<b>Acute</b>		
<i>Dermal</i>		
LD50	Rabbit	5 g/kg
<i>Oral</i>		
LD50	Rat	4400 mg/kg
CITRAL (CAS 5392-40-5)		
<b>Acute</b>		
<i>Dermal</i>		
LD50	Rabbit	2250 mg/kg
<i>Oral</i>		
LD50	Rat	4950 mg/kg

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Components	Species	Test Results
CITRONELLAL (CAS 106-23-0)		
<b>Acute</b>		
<i>Dermal</i>		
LD50	Rabbit	> 2500 mg/kg
<i>Oral</i>		
LD50	Rat	2420 mg/kg
CITRONELLOL (CAS 106-22-9)		
<b>Acute</b>		
<i>Dermal</i>		
LD50	Rabbit	2650 mg/kg
<i>Oral</i>		
LD50	Rat	3450 mg/kg
GERANYL ACETATE (CAS 105-87-3)		
<b>Acute</b>		
<i>Oral</i>		
LD50	Rat	6330 mg/kg Remarks: Behavioral:Somnolence (general depressed activity). Behavioral:Coma.
ISOPROPYLPHENYLBUTANAL (CAS 125109-85-5)		
<b>Acute</b>		
<i>Dermal</i>		
LD50	Rabbit	> 2000 mg/kg Method: OECD Test Guideline 402
<i>Oral</i>		
LD50	Rat	> 2000 mg/kg Method: OECD Test Guideline 401
LAURIC ALDEHYDE (CAS 112-54-9)		
<b>Acute</b>		
<i>Dermal</i>		
LD50	Rabbit	2000 mg/kg
<i>Oral</i>		
LD50	Rat	23100 mg/kg
TERPINOLENE (CAS 586-62-9)		
<b>Acute</b>		
<i>Dermal</i>		
LD50	Rabbit	> 5000 mg/kg



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Components	Species	Test Results
<i>Oral</i> LD50	Rat	4390 mg/kg

\* Estimates for product may be based on additional component data not shown.

<b>Skin corrosion/irritation</b>	Causes skin irritation. May cause skin irritation and/or dermatitis. May cause skin irritation in susceptible persons.
<b>Serious eye damage/eye irritation</b>	Causes serious eye irritation. Vapours may cause irritation to the eyes, respiratory system and the skin.
<b>Respiratory or skin sensitization</b>	
Respiratory sensitization	Not a respiratory sensitizer.
Skin sensitization	May cause an allergic skin reaction. Causes sensitization.
<b>Germ cell mutagenicity</b>	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.
<b>Carcinogenicity</b>	
<b>ACGIH Carcinogens</b>	
CITRAL (CAS 5392-40-5)	A4 Not classifiable as a human carcinogen.
<b>IARC Monographs. Overall Evaluation of Carcinogenicity</b>	
CARVENE (CAS 5989-27-5)	3 Not classifiable as to carcinogenicity to humans.
<b>OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)</b>	
Not listed.	
<b>Reproductive toxicity</b>	This product is not expected to cause reproductive or developmental effects.
<b>Specific target organ toxicity - single exposure</b>	Not classified.
<b>Specific target organ toxicity - repeated exposure</b>	Not classified.
<b>Aspiration hazard</b>	Not an aspiration hazard.
<b>Chronic effects</b>	Prolonged inhalation may be harmful.

## 12. ECOLOGICAL INFORMATION

**Ecotoxicity** Toxic to aquatic life with long lasting effects.

Components	Species	Test Results
CARVENE (CAS 5989-27-5)		
<b>Aquatic</b>		
Crustacea	EC50	Water flea ( <i>Daphnia pulex</i> ) 69.6 mg/l, 48 hours
Fish	LC50	Fathead minnow ( <i>Pimephales promelas</i> ) 0.619 - 0.796 mg/l, 96 hours
		Rainbow trout, donaldson trout ( <i>Oncorhynchus mykiss</i> ) 35 mg/l, 4 days
Other	EC50	Activated Sludge 3.94 mg/l

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Components		Species	Test Results
<b>CITRAL (CAS 5392-40-5)</b>			
<i>Acute</i>			
Other	EC20	Activated sludge of a predominantly domestic sewage	68 mg/l, 0.5 hours OECD Guideline 209 aquatic
<b>Aquatic</b>			
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.
<i>Acute</i>			
Algae	EC50	Green algae ( <i>Chlamydomonas variabilis</i> )	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	<i>Daphnia magna</i>	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	Ide, silver or golden orfe ( <i>Leuciscus idus</i> )	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.
<b>CITRONELLOL (CAS 106-22-9)</b>			
<b>Aquatic</b>			
<i>Acute</i>			
Algae	EC50	Algae	2.4 mg/l, 72 hours
Crustacea	EC50	<i>Daphnia</i>	17 mg/l, 48 hours
Fish	LC50	<i>Leuciscus idus</i> (Golden orfe)	10 - 22 mg/l, 96 hours
<b>GERANYL ACETATE (CAS 105-87-3)</b>			
<b>Aquatic</b>			
Algae	EC50	Green algae ( <i>Chlamydomonas variabilis</i> )	3.72 mg/l, 72 hours OECD Guideline 201 static. The statement of the toxic effect relates to the analytically determined concentration.

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Components		Species	Test Results
Crustacea	EC50	Daphnia magna	14.1 mg/l, 48 hours Directive 84/449/EEC, C.2 static. The statement of the toxic effect relates to the analytically determined concentration.
Fish	LC50	Fish	68.12 mg/l, 96 hours Cyprinus carpio. OECD Guideline 203 static. The product has not been tested. The statement has been derived from products of a similar structure or composition.
Other	EC10	Bacterium	> 10000 mg/l, 0.5 hours DIN 38412 Part 27 (draft) aquatic. The statement of the toxic effect relates to the analytically determined concentration. The product has low solubility in the test medium. An aqueous solution prepared with solubilizers has been tested.

#### ISOPROPYLPHENYLBUTANAL (CAS 125109-85-5)

##### Aquatic

Algae	ErC50	Green algae (Desmodesmus subspicatus)	11 mg/l, 72 hours
Crustacea	EC50	Water flea (Daphnia magna)	7.7 mg/l, 48 hours
Fish	LC50	Salmo gairdneri (new name Oncorhynchus mykiss)	1.082 mg/l, 96 hours

#### TERPINOLENE (CAS 586-62-9)

##### Aquatic

Crustacea	LC50	Daphnia magna	2.55 mg/l, 48 h
Fish	LC50	Pimephales promelas	0.72 mg/l, 96 h

\* Estimates for product may be based on additional component data not shown.

**Persistence and degradability** No data is available on the degradability of this product.

#### Bioaccumulative potential

##### Partition coefficient n-octanol / water (log Kow)

CARVENE	4.232
TERPINOLENE	4.23

**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.

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#### 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

<b>UN number</b>	3082
<b>UN proper shipping name</b>	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (CARVENE,2-CYCLOHEXYL-1,6-HEPTADIEN-3-ONE)
<b>Transport hazard class(es)</b>	9
<b>Subsidiary class(es)</b>	-
<b>Packing group</b>	III
<b>Environmental hazards</b>	Yes
<b>Labels required</b>	9

##### ADR

<b>UN number</b>	3082
<b>UN proper shipping name</b>	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (CARVENE,2-CYCLOHEXYL-1,6-HEPTADIEN-3-ONE)
<b>Transport hazard class(es)</b>	9
<b>Subsidiary class(es)</b>	-
<b>Packing group</b>	III
<b>Environmental hazards</b>	Yes
<b>Labels required</b>	9

##### RID

<b>UN number</b>	3082
<b>UN proper shipping name</b>	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (CARVENE,2-CYCLOHEXYL-1,6-HEPTADIEN-3-ONE)
<b>Transport hazard class(es)</b>	9
<b>Subsidiary class(es)</b>	-
<b>Packing group</b>	III
<b>Environmental hazards</b>	Yes
<b>Labels required</b>	9

##### DOT

##### BULK

<b>UN number</b>	NA1993
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<b>Proper shipping name</b>	COMBUSTIBLE LIQUID, N.O.S. (CARVENE,LINALOOL, 2-CYCLOHEXYL-1,6-HEPTADIEN-3-ONE)
<b>Hazard class</b>	Combustible liq
<b>Packing group</b>	III
<b>Environmental hazards</b>	
<b>Marine pollutant</b>	Yes
<b>Packaging exceptions</b>	150
<b>Packaging bulk</b>	242
<b>Labels required</b>	None

**DOT****NON-BULK**

Not regulated as dangerous goods.

**IATA**

Not regulated as dangerous goods.

**IMDG**

<b>UN number</b>	3082
<b>UN proper shipping name</b>	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (CARVENE,2-CYCLOHEXYL-1,6-HEPTADIEN-3-ONE)
<b>Transport hazard class(es)</b>	9
<b>Subsidiary class(es)</b>	-
<b>Packing group</b>	III
<b>Environmental hazards</b>	
<b>Marine pollutant</b>	Yes
<b>Labels required</b>	9
<b>Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code</b>	Not applicable.

ADN; ADR; IMDG; RID



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#### DOT BULK



#### Marine pollutant



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## 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** No



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### 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.

### US state regulations

#### US. Massachusetts RTK - Substance List

Not regulated.

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

CARVENE (CAS 5989-27-5)

TERPINOLENE (CAS 586-62-9)

#### 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)	No
Canada	Domestic Substances List (DSL)	No
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	No
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	No
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	No
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	No
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	No

\*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).



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

**Issue date** 08-03-2015  
**Revision date** 08-10-2015  
**Version #** 02  
**HMIS® ratings** Health: 2  
Flammability: 2  
Physical hazard: 0

**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.

**Revision Information**

Physical & Chemical Properties: Multiple Properties  
Transport Information: Material Transportation Information