

# SAFETY DATA SHEET

## 504913 KUMQUAT BASE

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### 1. IDENTIFICATION

<b>Product Description:</b>	<b>KUMQUAT BASE</b>
<b>CAS #</b>	MIXTURE
<b>Other means of identification</b>	
<b>Vigon Item #</b>	504913
<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

#### Company

Vigon International, Inc.  
127 Airport Road  
E. Stroudsburg, PA 18301  
For information call: 570-476-6300  
Web Site: [www.vigon.com](http://www.vigon.com)

#### 24 Hour Emergency Response Information

INFOTRAC (ACCT# 78928);  
1-800-535-5053 WITHIN THE U.S.A.  
1-352-323-3500 OUTSIDE THE U.S.A.

#### **Manufacturer/Importer/Supplier/Distributor information**

##### **Manufacturer**

<b>Company name</b>	Vigon International, Inc.
<b>Address</b>	127 Airport Road E. Stroudsburg, PA 18301 United States
<b>Telephone</b>	For information call: 570-476-6300
<b>Website</b>	<a href="http://www.vigon.com">www.vigon.com</a>
<b>E-mail</b>	Not available.
<b>Emergency phone number</b>	INFOTRAC (ACCT# 78928); 1-800-535-5053 WITHIN THE U.S.A. 1-352-323-3500 OUTSIDE THE U.S.A.

### 2. HAZARD(S) IDENTIFICATION

<b>Physical hazards</b>	Flammable liquids	Category 3
<b>Health hazards</b>	Skin corrosion/irritation	Category 2
	Serious eye damage/eye irritation	Category 1
	Sensitization, skin	Category 1
	Aspiration hazard	Category 1
<b>Environmental hazards</b>	Hazardous to the aquatic environment, long-term hazard	Category 2

#### **Label elements**



**Signal word**

**Danger**

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<b>Hazard statement</b>	Flammable liquid and vapor. May be fatal if swallowed and enters airways. Causes skin irritation. Causes skin and eye irritation. May cause an allergic skin reaction. Causes serious eye irritation. Toxic to aquatic life with long lasting effects.
<b>Precautionary statement</b>	
<b>Prevention</b>	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Keep container tightly closed. Ground and bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting equipment. Use non-sparking tools. Take action to prevent static discharges. Avoid breathing mist or vapor. Wash thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace. Avoid release to the environment. Wear protective gloves/protective clothing/eye protection/face protection.
<b>Response</b>	IF SWALLOWED: Immediately call a POISON CENTER/doctor. Do NOT induce vomiting. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If skin irritation or rash occurs: Get medical advice/attention. If eye irritation persists: Get medical advice/attention. Take off contaminated clothing and wash it before reuse. In case of fire: Use appropriate media to extinguish. Collect spillage.
<b>Storage</b>	Store in a well-ventilated place. Keep cool. Store locked up.
<b>Disposal</b>	Dispose of contents/container in accordance with local/regional/national/international regulations.
<b>Hazard(s) not otherwise classified (HNOC)</b>	None known.
<b>Supplemental information</b>	65.75% of the mixture consists of component(s) of unknown acute inhalation toxicity. 21.75% 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	%
4-CYCLOHEXYL-2-METHYLBUTAN-2-OL	2,2- dimethyl cyclohexane propanol alpha,alpha- dimethyl cyclohexane propanol	83926-73-2	15 - < 20
DIPENTENE	p- mentha-1,8-diene D,L- limonene 1- methyl-4-prop-1-en-2-ylcyclohexene	138-86-3	15 - < 20
DECANAL	CAPRINIC ALDEHYDE DECYL ALDEHYDE DECYLIC ALDEHYDE 1-DECANAL C-10 ALDEHYDE CAPRIC ALDEHYDE	112-31-2	7.5 - < 10
3-(4-methyl-1-cyclohex-3-enyl) butanal	butyraldehyde, 3-(4-methylcyclohex-3-en-1-yl)-	6784-13-0	2.5 - < 5
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	2.5 - < 5

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Chemical name	Common name and synonyms	CAS number	%
IONONE BETA	beta-cyclocitrylidene acetone (E)-4-(2,6,6-trimethyl-1-cyclohexenyl)but-3-en-2-one 4-(2,6,6-Trimethylcyclohex-1-ene-1-yl)-but-3-ene-2-one 3-Buten-2-one, 4-(2,6,6-trimethyl-1-cyclohexen-1-yl)-BETA-IONONE	14901-07-6	2.5 - < 5
OCTANAL	CAPRYLALDEHYDE OCTANALDEHYDE C-8 ALDEHYDE CAPRYLIC ALDEHYDE	124-13-0	2.5 - < 5
2,3-DIHYDRO-2,5-DIMETHYL-1H-INDENE-2-METHANOL	1H-INDENE-2-METHANOL, 2,3-DIHYDRO-2,5-DIMETHYL-	285977-85-7	1 - < 2.5
2,4-DIMETHYLCYCLOHEX-3-ENE-1-CARBALDEHYDE	4-formyl-1,3-dimethylcyclohex-1-ene 2,4-DIMETHYL-3-CYCLOHEXEN-1-CARBOXALDEHYDE 3-Cyclohexene-1-carboxaldehyde, 2,4-dimethyl-DIMETHYLCYCLOHEX-3-ENE-1-CARBALDEHYDE (MIXED ISOMERS)	68039-49-6	1 - < 2.5
ALLYL HEPTOATE	allyl enanthate ALLYL HEPTANOATE prop-2-enyl heptanoate Heptanoic acid 2-propen-1-yl ester allyl heptylate	142-19-8	1 - < 2.5
LAURIC ALDEHYDE	Dodecanal LAURYL ALDEHYDE	112-54-9	1 - < 2.5
NONANAL	nonanoic aldehyde nonylic aldehyde Pelargonic aldehyde NONYL ALDEHYDE	124-19-6	1 - < 2.5
BICYCLO[4.3.1]DECANE, 3-METHOXY-7,7-DIMETHYL-10-METHYLENE-		216970-21-7	0.5 < 1
UNDECATRIENE	Undeca-1,3,5-triene 1,3,5-undecatriene	16356-11-9	0 < 0.1
Other components below reportable levels			30 - < 40

#### 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.



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<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>	Aspiration may cause pulmonary edema and pneumonitis. 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.
<b>Indication of immediate medical attention and special treatment needed</b>	Not available.
<b>General information</b>	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

<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.
<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.
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#### 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. 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.

#### 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 STORAGE

#### 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, 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
DIPENTENE (CAS 138-86-3)	TWA	165.5 mg/m3
		30 ppm

#### Biological limit values

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

#### 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, such as personal protective equipment

##### Eye/face protection

Wear safety glasses with side shields (or goggles). Face shield is recommended.

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<b>Skin protection</b>	
<b>Hand protection</b>	Chemical resistant gloves.
<b>Other</b>	Use of an impervious apron is recommended. Chemical resistant gloves.
<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>	Not available.
<b>Flash point</b>	126.0 °F (52.2 °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>	1.4 at 20 °C
<b>Vapor density</b>	Not available.
<b>Relative density</b>	0.9 at d 20/20
<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.

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<b>Decomposition temperature</b>	Not available.
<b>Viscosity</b>	Not available.
<b>Other information</b>	
<b>Explosive properties</b>	Not explosive.
<b>Molecular formula</b>	Not applicable
<b>Oxidizing properties</b>	Not oxidizing.
<b>VOC</b>	< 53 %

#### 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.
<b>Ingestion</b>	Droplets of the product aspirated into the lungs through ingestion or vomiting may cause a serious chemical pneumonia.

<b>Symptoms related to the physical, chemical and toxicological characteristics</b>	Aspiration may cause pulmonary edema and pneumonitis. 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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##### Information on toxicological effects

<b>Acute toxicity</b>	May be fatal if swallowed and enters airways.
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Components	Species	Test Results
2,3-DIHYDRO-2,5-DIMETHYL-1H-INDENE-2-METHANOL (CAS 285977-85-7)		
<b>Acute</b>		
<i>Dermal</i>		
LD50	Rat	> 2000 mg/kg
<i>Oral</i>		
LD50	Rat	> 2000 mg/kg
<b>Subacute</b>		
<i>Oral</i>		
NOAEL	Rat	150 mg/kg, 28 days

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Components	Species	Test Results
2,4-DIMETHYLCYCLOHEX-3-ENE-1-CARBALDEHYDE (CAS 68039-49-6)		
<b>Acute</b>		
<i>Oral</i>		
LD50	Rat	3900 mg/kg
3-(4-methyl-1-cyclohex-3-enyl) butanal (CAS 6784-13-0)		
<b>Acute</b>		
<i>Oral</i>		
LD50	Rat	> 2000 mg/kg
4-CYCLOHEXYL-2- METHYLBUTAN-2-OL (CAS 83926-73-2)		
<b>Acute</b>		
<i>Dermal</i>		
LD50	Rabbit	> 2000 mg/kg
<i>Oral</i>		
LD50	Rat	> 5000 mg/kg
ALLYL HEPTOATE (CAS 142-19-8)		
<b>Acute</b>		
<i>Dermal</i>		
LD50	Rabbit	810 mg/kg
<i>Inhalation</i>		
LC50	Rat	3 mg/l, 4 hours
<i>Oral</i>		
LD50	Rat	218 mg/kg
CITRAL (CAS 5392-40-5)		
<b>Acute</b>		
<i>Dermal</i>		
LD50	Rat	> 2000 mg/kg
DECANAL (CAS 112-31-2)		
<b>Acute</b>		
<i>Dermal</i>		
LD50	Rabbit	5040 mg/kg
<i>Oral</i>		
LD50	Rat	3730 mg/kg
DIPENTENE (CAS 138-86-3)		
<b>Acute</b>		
<i>Dermal</i>		
LD50	Rabbit	5 g/kg
<i>Oral</i>		
LD50	Rat	5 g/kg



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Components	Species	Test Results
IONONE BETA (CAS 14901-07-6)		
<b>Acute</b>		
<i>Dermal</i>		
LD50	Rabbit	> 2000 mg/kg The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.
<i>Oral</i>		
LD50	Rat	> 4000 mg/kg
LAURIC ALDEHYDE (CAS 112-54-9)		
<b>Acute</b>		
<i>Dermal</i>		
LD50	Rabbit	> 2000 mg/kg
<i>Oral</i>		
LD50	Rat	> 231000 mg/kg
NONANAL (CAS 124-19-6)		
<b>Acute</b>		
<i>Dermal</i>		
LD50	Rabbit	> 5000 ml/kg
<i>Oral</i>		
LD50	Rat	> 5000 ml/kg
UNDECATRIENE (CAS 16356-11-9)		
<b>Acute</b>		
<i>Dermal</i>		
LD50	Rabbit	> 3000 mg/kg
<i>Oral</i>		
LD50	Rat	7563 mg/kg
<b>Skin corrosion/irritation</b>	Causes skin irritation.	
<b>Serious eye damage/eye irritation</b>	Causes serious eye irritation.	
<b>Respiratory or skin sensitization</b>		
<b>Respiratory sensitization</b>	Not a respiratory sensitizer.	
<b>Skin sensitization</b>	May cause an allergic skin reaction.	
<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>IARC Monographs. Overall Evaluation of Carcinogenicity</b>	Not listed.	

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### OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Not listed.

### US. National Toxicology Program (NTP) Report on Carcinogens

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>	May be fatal if swallowed and enters airways.
<b>Chronic effects</b>	Prolonged inhalation may be harmful.
<b>Further information</b>	This mixture has not been subjected to full toxicological testing. According to available data on the constituents the health classification criteria are met.

## 12. ECOLOGICAL INFORMATION

<b>Ecotoxicity</b>	Toxic to aquatic life with long lasting effects. This mixture has not been subjected to ecotoxicological testing as an entity. According to available data on the constituents the environmental classification criteria are met.
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Components	Species		Test Results
2,3-DIHYDRO-2,5-DIMETHYL-1H-INDENE-2-METHANOL (CAS 285977-85-7)			
Aquatic			
Acute			
Algae	ErC50	Algae	26.6 mg/l, 72 hours
Crustacea	EC50	Daphnia magna	27.2 mg/l, 48 hours
Fish	LC50	Fish	14.4 mg/l, 96 hours
Other	EC50	Activated Sludge	270 mg/l, 3 hours
2,4-DIMETHYLCYCLOHEX-3-ENE-1-CARBALDEHYDE (CAS 68039-49-6)			
Aquatic			
Acute			
Algae	EC50	Green algae (Desmodesmus subspicatus)	31 mg/l, 72 hours (based on growth rate - nominal concentration - OECD 201)
Crustacea	EC50	Daphnia magna	22.4 mg/l, 48 hours (measured concentration - similar to OECD 202)
Fish	LC50	Oncorhynchus mykiss (reported as Salmo gairdneri)	7.5 mg/l, 96 hours (measured concentration - OECD 203)
4-CYCLOHEXYL-2- METHYLBUTAN-2-OL (CAS 83926-73-2)			
Aquatic			
Algae	EC50	Algae	25 mg/l, 72 hours
Crustacea	EC50	Daphnia	3.8 mg/l, 48 hours
Fish	LC50	Fish	13 mg/l, 96 hours

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Components		Species	Test Results
ALLYL HEPTOATE (CAS 142-19-8)			
<b>Aquatic</b>			
<i>Acute</i>			
Crustacea	EC50	Daphnia magna	0.89 mg/l, 48 hours OECD 202/ ISO 6341
Fish	LC50	Fish	0.655 mg/l, 96 hours
CITRAL (CAS 5392-40-5)			
<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 (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	Ide, 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.
DIPENTENE (CAS 138-86-3)			
<b>Aquatic</b>			
Fish	LC50	Carp (Leuciscus idus melanotus)	34 mg/l, 48 hours

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Components		Species	Test Results
IONONE BETA (CAS 14901-07-6)			
Other	EC50	Activated sludge of a predominantly domestic sewage	1000 mg/l, 0.5 hours DIN EN ISO 8192-OECD 209-88/302/EEC,P C aerobic
Aquatic			
Algae	EC50	Green algae (Chlamydomonas variabilis)	22.15 mg/l, 72 hours DIN 38412 Part 9 static The detail of the toxic effect relate to the nominal concentration. The product has low solubility in the test medium. An aqueous solution prepared with solubilizers has been tested.
Crustacea	EC50	Daphnia magna	4.03 mg/l, 48 hours OECD Giudeline 202, part 1 static The detail of the toxic effect relate to the nominal concentration. The product has low solubility in the test medium. An aqueous solution prepared with solubilizers has been tested.
Fish	LC50	Pimephales promelas	5.09 mg/l, 96 hours EPA 72-1 Flow through The detail of the toxic effect relate to the nominal concentration. The product has low solubility in the test medium. An aqueous solution prepared with solubilizers has been tested.
UNDECATRIENE (CAS 16356-11-9)			
Aquatic			
Acute			
Crustacea	EC50	Daphnia	0.048 mg/l, 48 hours
Persistence and degradability		No data is available on the degradability of any ingredients in the mixture.	
Bioaccumulative potential			
Partition coefficient n-octanol / water (log Kow)			
2,3-DIHYDRO-2,5-DIMETHYL-1H-INDENE-2-METHANOL		2.94	
DIPENTENE		4.232	
NONANAL		3.27	
Bioconcentration factor (BCF)			
ALLYL HEPTOATE		123.4, (calculated)	
Mobility in soil		No data available.	
Other adverse effects		The product contains volatile organic compounds which have a photochemical ozone creation potential.	

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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>	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 disposal.

#### 14. TRANSPORT INFORMATION

##### ADN

UN number	1197
UN proper shipping name	EXTRACTS, FLAVOURING, LIQUID (DIPENTENE)
Transport hazard class(es)	3
Subsidiary class(es)	-
Packing group	III
Environmental hazards	No
Labels required	3

##### ADR

UN number	1197
UN proper shipping name	EXTRACTS, FLAVOURING, LIQUID (DIPENTENE)
Transport hazard class(es)	3
Subsidiary class(es)	-
Packing group	III
Environmental hazards	No
Labels required	3

##### RID

UN number	1197
UN proper shipping name	EXTRACTS, FLAVOURING, LIQUID (DIPENTENE)
Transport hazard class(es)	3
Subsidiary class(es)	-
Packing Group	III
Environmental Hazards	No
Labels required	3
Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.

##### DOT

##### BULK

UN number	1197
Proper shipping name	EXTRACTS, FLAVOURING, LIQUID (DIPENTENE)
Hazard class	3
Packing group	III

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**Environmental hazards**

Marine pollutant	No
Packaging exceptions	150
Packaging bulk	242
Labels required	3

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

Not regulated as dangerous goods.

**IATA**

UN number	1197
UN proper shipping name	EXTRACTS, FLAVOURING, LIQUID
Transport hazard class(es)	3
Subsidiary class(es)	-
Packing group	III
Environmental hazards	No
Labels required	3

**IMDG**

UN number	1197
UN proper shipping name	EXTRACTS, FLAVOURING, LIQUID (DIPENTENE)
Transport hazard class(es)	3
Subsidiary class(es)	-
Packing group	III
Environmental hazards	
Marine pollutant	No
Labels required	3
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	Not applicable.

ADN; ADR; DOT BULK; IATA; IMDG; RID

**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)**



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**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 chemical**      No (Exempt)

**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.

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

**Issue date**      01-19-2016

**Revision date**      07-02-2019

**Version #**      02

**HMIS® ratings**      Health: 3\*  
Flammability: 2  
Physical hazard: 0



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#### Disclaimer

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#### Revision information

This document has undergone significant changes and should be reviewed in its entirety.