

505022 WARDIA

Revision Date: 05-04-2018 Page 1 of 15

Version # 02 Print Date: 05-04-2018

1. IDENTIFICATION

Product Description: WARDIA
CAS # MIXTURE

Other means of identification

Vigon Item # 505022

Recommended use Concentrated aromatic ingredient which may be used fragrance compounds according to legal and

IFRA guidelines.

Recommended restrictions 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. 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

Company name Vigon International, Inc.

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.

Emergency phone number 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

Physical hazards Not classified.

Health hazards Acute toxicity, oral Category 4

Skin corrosion/irritation Category 2
Serious eye damage/eye irritation Category 1
Sensitization, skin Category 1

Environmental hazards Not classified.

Label elements



Signal word Danger



505022 WARDIA

Revision Date: 05-04-2018 Page 2 of 15

Version # 02 Print Date: 05-04-2018

Hazard statement Harmful if swallowed. Causes skin irritation. May cause an allergic skin reaction. Causes serious

eye damage.

Precautionary statement

Prevention Avoid breathing mist or vapor. Wash thoroughly after handling. Do not eat, drink or smoke when

using this product. Contaminated work clothing should not be allowed out of the workplace. Wear

eye protection/face protection. Wear protective gloves.

Response IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell. Rinse mouth. 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 69.75% of the mixture consists of component(s) of unknown acute inhalation toxicity.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Mixtures

Chemical name	Common name and synonyms	CAS number	%	
PHENYL ETHYL ALCOHOL	BENZYL CARBINOL 2-Phenylethanol	60-12-8	40 - < 50	
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	7.5 - < 10	
GERANIOL	3,7-DIMETHYL-2,6-OCTADIEN-1-OL (2E)-3,7- dimethylocta-2,6-dien-1-ol LEMONOL GERANYL ALCOHOL	106-24-1	7.5 - < 10	
HYDROXYCITRONELLAL	7-HYDROXY-3,7-DIMETHYL-OCTANAL HYDROXYCITRONELLAL Octanal, 7-hydroxy-3,7-dimethyl- HYDROXY-CITRONELLAL	107-75-5	2.5 - < 5	
LINALOOL	2,6-DIMETHYL-2,7-OCTADIENE-6-OL 1,6-Octadien-3-ol, 3,7-dimethyl- 3,7-Dimethylocta-1,6-dien-3-ol LINALYL ALCOHOL	78-70-6	1 - < 2.5	
NEROL	(2Z)-3,7- dimethylocta-2,6-dien-1-ol	106-25-2	1 - < 2.5	
EUGENOL	5-ALLYL-2-HYDROXY-ANISOL 2-METHOXY-4-(2-PROPENYL)-PHENOL 1-HYDROXY-2-METHOXY-4-ALLYLBEN ZENE 2-METHOXY-4-ALLYLPHENOL	97-53-0	0.5< 1	



505022 WARDIA

Revision Date: 05-04-2018 Page 3 of 15

Version # 02 Print Date: 05-04-2018

Chemical name	Common name and synonyms	CAS number	%
GERANYL ACETATE	geranyl ethanoate 2,6-DIMETHYL-2,6-OCTADIENE-8-YL ACETATE 3,7-DIMETHYL-2-TRANS-6-OCTADIENY L ACETATE [(2E)-3,7- dimethylocta-2,6-dienyl] acetate	105-87-3	0.5< 1
BENZENEACETALDEHYDE, 4-METHYL-	P-TOLYLACETALDEHYDE P-METHYL PHENYL ACETALDEHYDE	104-09-6	0.1< 0.5
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	0.1< 0.5
CITRONELLYL ACETATE	3,7-dimethyl-6-octen-1-yl ethanoate citronellyl ethanoate 3,7- dimethyloct-6-enyl acetate 1-acetoxy-3,7-dimethyl oct-6-ene	150-84-5	0.1< 0.5
DIPHENYL OXIDE PHENOXYBENZOL phenoxybenzene phenyl ether biphenyl oxide		101-84-8	0.1< 0.5
UNDECYLENIC ALDEHYDE	hendecenal Undec-10-enal 10-UNDECENAL	112-45-8	0.1< 0.5
Other components below reporta	ble levels		20 - < 30

4. FIRST-AID MEASURES

Inhalation If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing.

For breathing difficulties, oxygen may be necessary. Call a physician if symptoms develop or

persist.

Skin contact

Take off immediately all contaminated clothing. Get medical attention if irritation develops and

persists. Wash skin thoroughly with soap and water for several minutes.

Eye contact Remove contact lenses, if present and easy to do. Get medical attention if irritation develops and

persists. Promptly wash eyes with plenty of water while lifting the eye lids.

Ingestion Call a physician or poison control center immediately. If swallowed, rinse mouth with water (only if

the person is conscious). Do not induce vomiting. If vomiting occurs, the head should be kept low

so that stomach vomit doesn't enter the lungs.

Most important

symptoms/effects, acute and

delayed

Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result. Skin irritation. May cause redness

and pain. May cause an allergic skin reaction. Dermatitis. Rash.

Indication of immediate medical attention and special treatment needed

Not available.

General information

Ensure that medical personnel are aware of the material(s) involved, and take precautions to

protect themselves. Show this safety data sheet to the doctor in attendance.



505022 WARDIA

Revision Date: 05-04-2018 Page 4 of 15

Version # 02 Print Date: 05-04-2018

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

Unsuitable extinguishing media

Specific hazards arising from

the chemical

Special protective equipment and precautions for firefighters

Fire fighting equipment/instructions

Specific methods

General fire hazards

Water spray, fog, CO2, dry chemical, or alcohol resistant foam.

Do not use a solid water stream as it may scatter and spread fire.

Fire may produce irritating, corrosive and/or toxic gases.

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.

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.

Use water spray to cool unopened containers.

Static charges generated by emptying package in or near flammable vapor may cause flash fire.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Methods and materials for containment and cleaning up

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.

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.



505022 WARDIA

Revision Date: 05-04-2018 Page 5 of 15

Version # 02 Print Date: 05-04-2018

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. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Туре	Value	Form
DIPHENYL OXIDE (CAS 101-84-8)	PEL	7 mg/m3	Vapor.
		1 ppm	Vapor.
US. ACGIH Threshold Limit Values			
Components	Туре	Value	Form
CITRAL (CAS 5392-40-5)	TWA	5 ppm	Inhalable fraction and
			vapor.
DIPHENYL OXIDE (CAS	STEL	2 ppm	Vapor.
101-84-8)			
	TWA	1 ppm	Vapor.
US. NIOSH: Pocket Guide to Chem	ical Hazards		
Components	Туре	Value	Form
DIPHENYL OXIDE (CAS 101-84-8)	REL	7 mg/m3	Vapor.
		1 ppm	Vapor.
	TWA	7 mg/m3	Vapor.
		1 ppm	Vapor.

Biological limit values

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

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.

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.



505022 WARDIA

Revision Date: 05-04-2018 Page 6 of 15

Version # 02 Print Date: 05-04-2018

Form Liquid.

Color Refer to Spec Sheet

Odor Characteristic.
Odor threshold Not available.
pH Not available.
Melting point/freezing point Not available.
Initial boiling point and boiling Not available.

range

Flash point > 200.0 °F (> 93.3 °C) Closed Cup

Evaporation rate Not available.

Flammability (solid, gas) Not applicable.

Upper/lower flammability or explosive limits

Flammability limit - lower

(%)

Not available.

Flammability limit - upper

(%)

Not available.

Explosive limit - lower (%)

Explosive limit - upper (%)

Vapor pressure

Vapor density

Relative density

Not available.

Not available.

Not available.

1 at d 20/20

Solubility(ies)

Solubility (water) Insoluble

Partition coefficient Not available.

(n-octanol/water)

Auto-ignition temperatureNot available.Decomposition temperatureNot available.ViscosityNot available.

Other information

Explosive properties

Molecular formula

Oxidizing properties

Not applicable

Not oxidizing.

Specific gravity

1 at 25 °C

VOC

< 3 %

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.



505022 WARDIA

Page 7 of 15 Revision Date: 05-04-2018

Print Date: 05-04-2018 Version # 02

Conditions to avoid Avoid temperatures exceeding the flash point. Contact with incompatible materials.

Incompatible materials Strong oxidizing agents.

Hazardous decomposition

products

No hazardous decomposition products if stored and handled as indicated.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Inhalation Prolonged inhalation may be harmful.

Skin contact Causes skin irritation. May cause an allergic skin reaction.

Eye contact Causes serious eye damage.

Ingestion Harmful if swallowed.

Symptoms related to the Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result. Skin irritation. May cause physical, chemical and toxicological characteristics redness and pain. May cause an allergic skin reaction. Dermatitis. Rash.

Information on toxicological effects

Acute toxicity Harmful if swallowed.

Components **Species Test Results**

BENZENEACETALDEHYDE, 4-METHYL- (CAS 104-09-6)

Acute

Oral

LD50 Rat

5000 mg/kg

CITRAL (CAS 5392-40-5)

Acute

Dermal

LD50 Rat > 2000 mg/kg

Oral

Rat LD50 4950 mg/kg

CITRONELLOL (CAS 106-22-9)

Acute

Dermal

LD50 Rabbit 2650 mg/kg

Oral

3450 mg/kg LD50 Rat

CITRONELLYL ACETATE (CAS 150-84-5)

Acute

Dermal

Rabbit LD50 > 2000 mg/kg

Oral

LD50 Rat 6800 mg/kg



505022 WARDIA

Revision Date: 05-04-2018 Page 8 of 15

Version # 02 Print Date: 05-04-2018

Components	Species	Test Results
DIPHENYL OXIDE (CAS 10	U1-84-8)	
Acute		
<i>Dermal</i> LD50	Rabbit	> 7040 mallia
	Rabbit	> 7940 mg/kg
Oral LD50	Det	0000
LD50	Rat	2830 mg/kg
EUGENOL (CAS 97-53-0)		
Acute		
Dermal	5 .	T000 # 1 /
LCL0	Rat	5000 mg/kg subcutaneous
Inhalation		
LC50	Rat	2580 mg/m³, 4 hours ARTODN 62,381,1988
GERANIOL (CAS 106-24-1)	
Acute		
Dermal		
LD50	Rabbit	> 5000 mg/kg
Oral		
LD50	Rat	3600 mg/kg
HYDROXYCITRONELLAL	(CAS 107-75-5)	
Acute		
Dermal		
LD50	Rabbit	> 2000 mg/kg OECD 402: limit
Oral		
LD50	Rat	> 5000 mg/kg OECD 401: limit
LINALOOL (CAS 78-70-6)		
Acute		
Oral		
LD50	Rat	2790 mg/kg
NEROL (CAS 106-25-2)		
Acute		
Dermal		
LD50	Rabbit	> 5000 mg/kg
Oral		
LD50	Rat	4500 mg/kg



505022 WARDIA

Revision Date: 05-04-2018 Page 9 of 15

Version # 02 Print Date: 05-04-2018

Components Species Test Results

PHENYL ETHYL ALCOHOL (CAS 60-12-8)

Acute

Dermal

LD50 Rabbit 2500 mg/kg

Oral

LD50 Rat 1610 mg/kg

UNDECYLENIC ALDEHYDE (CAS 112-45-8)

Acute

Dermal

LD50 Rabbit > 5000 mg/kg

Oral

LD50 Rat > 5000 mg/kg

Skin corrosion/irritation Causes skin irritation.

Serious eye damage/eye

irritation

Causes serious eye damage.

Respiratory or skin sensitization

Respiratory sensitization Not a respiratory sensitizer.

Skin sensitization May cause an allergic skin reaction.

Germ cell mutagenicity

No data available to indicate product or any components present at greater than 0.1% are

mutagenic or genotoxic.

Carcinogenicity

IARC Monographs. Overall Evaluation of Carcinogenicity

Not listed.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1052)

Not regulated.

US. National Toxicology Program (NTP) Report on Carcinogens

Not listed.

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

Not available.

Reproductive toxicityThis product is not expected to cause reproductive or developmental effects.

Specific target organ toxicity -

single exposure

Not classified.

Specific target organ toxicity -

repeated exposure

Not classified.

Aspiration hazard Not an aspiration hazard.

Chronic effects Prolonged inhalation may be harmful.

Further information This mixture has not been subjected to toxicological testing as an entity. According to available

data on the constituents the health classification criteria are met.



505022 WARDIA

Revision Date: 05-04-2018 Page 10 of 15

Version # 02 Print Date: 05-04-2018

12. ECOLOGICAL INFORMATION

Ecotoxicity 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.

Components		Species	Test Results
CITRAL (CAS 5392-40-5	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	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.
CITRONELLOL (CAS 10	6-22-9)		
Aquatic	•		
Acute			
Algae	EC50	Algae	2.4 mg/l, 72 hours
Crustacea	EC50	Daphnia	17 mg/l, 48 hours



505022 WARDIA

Revision Date: 05-04-2018 Page 11 of 15

Version # 02 Print Date: 05-04-2018

CITRONELLYL ACETA Other Aquatic Fish DIPHENYL OXIDE (CA	EC20 LC50	Micro-organisms	> 1000 mg/l, 30 min
Aquatic Fish	LC50		> 1000 mg/l, 30 min
Fish		Zahara dania (Danis sessia)	
-		Zahma damia (Damia wawia)	
IPHENYL OXIDE (CA	S 101-84-8)	Zebra danio (Danio rerio)	6.1 mg/l, 96 hours
	0 .0 . 0 . 0)		
Aquatic			
Crustacea	LC50	Water flea (Daphnia magna)	> 1.1 - < 1.9 mg/l, 24 hours
Fish	LC50	Carp (Leuciscus idus melanotus)	3 mg/l, 48 hours
		Sheepshead minnow (Cyprinodon variegatus)	> 1.8 - < 3.2 mg/l, 96 hours
EUGENOL (CAS 97-53	-0)		
Other	LD50	Bird	> 316 mg/kg Schafer, 1983
Aquatic			
Crustacea	EC50	Daphnia magna	1.13 mg/l, 48 hours
	LD50	Invertebrates (Invertebrates)	0.012 mg/kg Lee, 1997
Fish	LC50	Danio rerio	13 mg/l, 96 hours
		Oncorhynchus mykiss	60.8 mg/l, 96 hours
SERANIOL (CAS 106-2	24-1)		
Other	EC50	Activated sludge of a predominantly domestic sewage	70 mg/l, 0.5 hours
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
		Fathead minnow (Pimephales promelas)	> 2.7 - < 3.8 mg/l, 96 hours
GERANYL ACETATE ((CAS 105-87-3)		<u>-</u>
Aquatic	,		
Algae	EC50	Green algae (Chlamydomonas variabilis)	3.72 mg/l, 72 hours OECD Guideline 201 static. The statement of the tox effect relates to the analytically determined concentration.
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.



505022 WARDIA

Revision Date: 05-04-2018 Page 12 of 15

Version # 02 Print Date: 05-04-2018

Components		Species	Test Results
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.
LINALOOL (CAS 78-70-6)			
Other	EC10	Activated sludge of a predominantly domestic sewage	> 100 mg/l, 3 hours
Aquatic			
Algae	EC50	Green algae (Chlamydomonas variabilis)	88.3 mg/l, 96 hours DIN 38412 Part 9 static. The details of the toxic effect related to the nominal concentration.
Crustacea	EC50	Daphnia magna	20 mg/l, 48 hours DIN 38412 Part 11 static. The details of the toxic effect related to the nominal concentration.
Fish	LC50	Ide, silver or golden orfe (Leuciscus idus)	> 22 - < 46 mg/l, 96 hours DIN 38412 Part 15 static. The details of the toxic effect related to the nominal concentration.
	LC50-R	Fish	27.8 mg/l, 96 hours
NEROL (CAS 106-25-2)			
Acute			
Algae	EC50	Green algea (Pseudokirchneriella subcapitata)	9.54 mg/l, 72 hours
			2.16 mg/l, 72 hours
Aquatic			
Acute			
Crustacea	EC50	Daphnia magna	32.4 mg/l, 48 hours
Fish	LC50	Danio rerio	20.3 mg/l, 96 hours

Persistence and degradability



505022 WARDIA

Revision Date: 05-04-2018 Page 13 of 15

Version # 02 Print Date: 05-04-2018

Biodegradability

Percent degradation (Aerobic biodegradation)

GERANIOL > 90 % OECD 301A (new version)(aerobic), activatied

sludge, domestic DOC reduction, Readily biodegradable

(according to OECD criteria)

Percent degradation (Aerobic biodegradation-ready)

LINALOOL > 60 - < 70 %, Readily biodegradable (according to OECD

criteria).

Result: OECD 301D; EEC 92/69, C4-E (aerobic)

Test Duration: 28 days

Bioaccumulative potential

Partition coefficient n-octanol / water (log Kow)

DIPHENYL OXIDE 4.21 EUGENOL 2.27

LINALOOL 2.97, (OECD Guideline 107)

PHENYL ETHYL ALCOHOL 1.36

Bioconcentration factor (BCF)

DIPHENYL OXIDE 470

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.

13. DISPOSAL CONSIDERATIONS

Disposal instructionsDo 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.

Local disposal regulations Dispose in accordance with all applicable regulations.

Hazardous waste code Not established.

Waste from residues / unused

products

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

disposal.

14. TRANSPORT INFORMATION

ADN

Not regulated as dangerous goods.

ADR

Not regulated as dangerous goods.

RID

Not regulated as dangerous goods.

DOT

BULK

Not regulated as dangerous goods.



505022 WARDIA

Revision Date: 05-04-2018 Page 14 of 15

Version # 02 Print Date: 05-04-2018

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.

CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

SARA 304 Emergency release notification

Not regulated.

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

Not available.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1052)

Not regulated.

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

Not regulated.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous

Yes

chemical

Classified hazard Acute toxicity (any route of exposure)

categories Skin corrosion or irritation

Serious eye damage or eye irritation Respiratory or skin sensitization

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

Not regulated.

(SDWA)



505022 WARDIA

Revision Date: 05-04-2018 Page 15 of 15

Version # 02 Print Date: 05-04-2018

US state regulations

California Proposition 65

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

Not listed.

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

 Issue date
 01-11-2016

 Revision date
 05-04-2018

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

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 to assess its' safety in the final application. 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 informationThis document has undergone significant changes and should be reviewed in its entirety.