# **Product Specification**



Product Name: MASSOIA LACTONE

Vigon Code: 500477

**CAS Number:** 54814-64-1

FEMA Number: 3744

### Characteristic:

Acid Value Assay (sum Of Isomers)% Gas Chromatograph Odor Refractive Index (@20c) Specific Gravity (@25c) Color/appearance 
 Specification:

 0.000
 9.000

 95.00
 100.00

 PASSES TEST
 CHARACTERISTIC ODOR.

 1.4670
 1.4770

 0.9790
 0.9890

 PALE YELLOW TO PALE BROWN LIQUID.

### Additional Product Information:

Flash Point: 199 °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: March 8, 2022

Printed Date: February 20, 2024



# 500477 MASSOIA LACTONE

 Revision Date: 06-01-2020
 Page 1 of 9

 Version # 04
 Print Date: 06-01-2020

1. IDENTIFICATION			
Product Description:	MASSOIA LACTONE		
CAS #	54814-64-1		
FEMA Number	3744		
Other means of identification Vigon Item #	500477	500477	
Recommended use		-	which may be used in flavor and fragrance EMA GRAS/FDA guidelines.
Recommended restrictions	For Manufacturing Use On	lly	
<u>Company</u>		24 Hour Emerger	ncy Response Information
Vigon International, Inc.		INFOTRAC (ACC	CT# 78928);
127 Airport Road			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			
Manufacturer/Importer/Supplier/Di	stributor information		
Manufacturer			
Company name	Vigon International, Inc.		
Address	127 Airport Road		
	E. Stroudsburg, PA 18301		
Telephone	United States For information call:	570-476-6300	
Telephone Website	www.vigon.com	570-470-0300	
E-mail	regulatory@vigon.com		
Emergency phone number	INFOTRAC	(ACCT# 78928)	:
	1-800-535-5053	WITHIN THE U	
	1-352-323-3500	OUTSIDE THE	U.S.A.
2. HAZARD(S) IDENTIFICATION			
Physical hazards	Flammable liquids		Category 4
Health hazards	Skin corrosion/irritation		Category 2
	Serious eye damage/eye i	rritation	Category 2A
	Sensitization, skin		Category 1

**Environmental hazards** 

Label elements



Not classified.



# 500477 MASSOIA LACTONE

Revision Date: 06-01-2020	Page 2 of 9	
Version # 04	Print Date: 06-01-2020	
Hazard statement	Combustible liquid. Causes skin irritation. Causes skin and eye irritation. May cause an allergic skin reaction. Causes serious eye irritation.	
Precautionary statement		
Prevention	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Wash thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace. Wear protective gloves/protective clothing/eye protection/face protection.	
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. 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.	
Storage	Store in a well-ventilated place.	
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 oral toxicity. 100% of the substance consists of component(s) of unknown acute dermal toxicity. 100% of the substance	

substance consists of component(s) of unknown acute dermal toxicity. 100% of the substance consists of component(s) of unknown acute inhalation toxicity. 100% of the substance consists of component(s) of unknown acute hazards to the aquatic environment. 100% of the substance consists of component(s) of unknown long-term hazards to the aquatic environment.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

#### Substances

Chemical name	Common name and synonyms	CAS number	%
6-pentyl-5,6-dihydro pyran-2-one	cocolactone 5,6-DIHYDRO-6-PENTYL-2H-PYRAN-2- ONE dec-2-en-5-olide	54814-64-1	100

### 4. FIRST-AID MEASURES

Inhalation	If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing. For breathing difficulties, oxygen may be necessary. Call a physician if symptoms develop or persist.
Skin contact	Take off immediately all contaminated clothing. Get medical attention if irritation develops and persists. Wash skin thoroughly with soap and water for several minutes.
Eye contact	Remove contact lenses, if present and easy to do. Get medical attention if irritation develops and persists. Promptly wash eyes with plenty of water while lifting the eye lids.
Ingestion	Call a physician or poison control center immediately. If swallowed, rinse mouth with water (only if the person is conscious). Do not induce vomiting. If vomiting occurs, the head should be kept low so that stomach vomit doesn't enter the lungs.
Most important symptoms/effects, acute and delayed	Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Skin irritation. May cause redness and pain. May cause an allergic skin reaction. Dermatitis. Rash.
Indication of immediate medical attention and special treatment needed	Not available.



# 500477 MASSOIA LACTONE

Revision Date: 06-01-2020 Version # 04 Page 3 of 9 Print Date: 06-01-2020

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.
5. FIRE-FIGHTING MEASU	RES
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 equipment and emergency procedures	Eliminate all sources of ignition. Avoid contact with skin or inhalation of spillage, dust or vapor. Keep unnecessary personnel away. 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	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. 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.



# 500477 MASSOIA LACTONE

Revision Date: 06-01-2020 Version # 04 Page 4 of 9 Print Date: 06-01-2020

#### 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. Keep container closed. Handle containers with care. Open slowly in order to control possible Conditions for safe storage, pressure release. Store in a cool, well-ventilated area. including any incompatibilities 8. EXPOSURE CONTROLS/PERSONAL PROTECTION This substance has no PEL, TLV, or other recommended exposure limit. Occupational exposure limits **Biological limit values** No biological exposure limits noted for the ingredient(s). Use explosion-proof ventilation equipment to stay below exposure limits. Appropriate engineering controls Individual protection measures, such as personal protective equipment Face shield is recommended. Eye/face protection Skin protection Hand protection Chemical resistant gloves. Use of an impervious apron is recommended. Other 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 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

Appearance	Refer to Spec Sheet
Physical state	Liquid.
Form	Liquid.
Color	Refer to Spec Sheet
Odor	Characteristic.
Odor threshold	Not available.
рН	Not available.
Melting point/freezing point	Not available.
Initial boiling point and boiling range	546.8 °F (286 °C)
Flash point	199.0 °F (92.8 °C) Closed Cup
•	
Evaporation rate	Not available.
Flammability (solid, gas)	Not applicable.



# 500477 MASSOIA LACTONE

 Revision Date: 06-01-2020
 Page 5 of 9

 Version # 04
 Print Date: 06-01-2020

#### Upper/lower flammability or explosive limits

Flammability limit - lower (%)	Not available.
Flammability limit - upper (%)	Not available.
Explosive limit - lower (%)	Not available.
Explosive limit - upper (%)	Not available.
Vapor pressure	0.0006 kPa (77 °F (25 °C))
Vapor density	> 1
Relative density	Not available.
Solubility(ies)	
Solubility (water)	Insoluble
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	Not available.
Other information	
Explosive properties	Not explosive.
Molecular formula	C10H16O2
Molecular weight	168.24 g/mol 168.24 g/mol
Oxidizing properties	Not oxidizing.
Specific gravity	0.98 at 25 °C

### **10. STABILITY AND REACTIVITY**

Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use.
Conditions to avoid	Avoid heat, sparks, open flames and other ignition sources. 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	Knowledge about health hazard is incomplete.
Skin contact	Causes skin irritation. May cause an allergic skin reaction.
Eye contact	Causes serious eye irritation.



# 500477 MASSOIA LACTONE

Revision Date: 06-01-2020 Version # 04 Page 6 of 9 Print Date: 06-01-2020

Ingestion	Knowledge about health hazard is incomplete.
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	8
Acute toxicity	Not known.
Skin corrosion/irritation	Causes skin irritation. Irritation (dermal)(FHSA): irritant @ 100% Irritation (dermal)(HRIPT): irritant @ 6%
Serious eye damage/eye irritation	Causes serious eye irritation.
Respiratory or skin sensitization	
Respiratory sensitization	Due to partial or complete lack of data the classification is not possible.
Skin sensitization	May cause an allergic skin reaction.
Germ cell mutagenicity	Due to partial or complete lack of data the classification is not possible.
Carcinogenicity	Due to partial or complete lack of data the classification is not possible.
IARC Monographs. Overall E	valuation of Carcinogenicity
Not listed.	
	Substances (29 CFR 1910.1001-1053)
Not listed.	rom (NITR) Report on Careinagona
Not listed.	ram (NTP) Report on Carcinogens
Reproductive toxicity	Due to partial or complete lack of data the classification is not possible.
Specific target organ toxicity -	Due to partial or complete lack of data the classification is not possible.
single exposure	
Specific target organ toxicity - repeated exposure	Due to partial or complete lack of data the classification is not possible.
Aspiration hazard	Due to partial or complete lack of data the classification is not possible.
12. ECOLOGICAL INFORM	IATION
Ecotoxicity	A summary of ecotoxicological data is available on request.
Persistence and degradability	No data is available on the degradability of this substance.
Bioaccumulative potential	No data available.

Mobility in soilNo data available.Other adverse effectsNo other adverse environmental effects (e.g. ozone deplet

# ectsNo other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation<br/>potential, endocrine disruption, global warming potential) are expected from this component.

### **13. DISPOSAL CONSIDERATIONS**

**Disposal instructions** 

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.



# 500477 MASSOIA LACTONE

Revision Date: 06-01-2020	Page 7 of 9	
Version # 04	Print Date: 06-01-2020	
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

UN number	NA1993
Proper shipping name	COMBUSTIBLE LIQUID, N.O.S. (6-pentyl-5,6-dihydro pyran-2-one)
Hazard class	Combustible liq
Packing group	III
Environmental hazards	
Marine pollutant	No
Packaging exceptions	150
Packaging bulk	241
Labels required	None
DOT	
NON-BULK	
Not regulated as dangerous g	loods.

#### 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.



# 500477 MASSOIA LACTONE

Revision Date: 06-01-2020 Version # 04 Page 8 of 9 Print Date: 06-01-2020

SARA 304 Emergency release	se notification
Not regulated.	
OSHA Specifically Regulated	l Substances (29 CFR 1910.1001-1053)
Not listed.	
Superfund Amendments and Rea SARA 302 Extremely hazard Not listed.	
SARA 311/312 Hazardous chemical	Yes
Classified hazard categories	Flammable (gases, aerosols, liquids, or solids) 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 (SDWA)	Not regulated.
16. OTHER INFORMATION	N, INCLUDING DATE OF PREPARATION OR LAST REVISION
Issue date	11-17-2015

loodo dato	
Revision date	06-01-2020
Version #	04
HMIS® ratings	Health: 2
	Flammability: 2
	Physical hazard: 0



### 500477 MASSOIA LACTONE

Revision Date: 06-01-2020	
Version # 04	

Page 9 of 9 Print Date: 06-01-2020

#### 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 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 information**

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





Rabbi Avram Ossey Rabbinic Administrator To verify or for the most up to date certificate please go to www.koshercertificate.com 201 The Plaza, Teaneck, NJ 07666 | Phone 201.837.0500 | fax 201.837.0126



Disclaimer: This certificate is the private property of KOF-K Kosher Supervision and cannot be reposted without the express permission of KOF-K Kosher Supervision. Page 1 of 1



This is to certify that the following product(s) have been produced under the supervision of the Islamic Food and Nutrition Council of America(IFANCA). The production facility as well as component ingredients have been reviewed and approved. The product(s) are in compliance with the halal requirements under Islamic laws.

Date: November 21, 2023 Document #: 6718.12506.II233781

Company Name & Address:	/igon International, LL	C 127 Airport Road East Stroudsburg, Pennsylvan	ia 18301 USA	
Plant Name & Address:	igon International, LL	C 127 Airport Road East Stroudsburg, Pennsylvan	ia 18301 USA	
ProductName		Product Code	Halal-ID	Product Certificate #
1. MASSOIA LACTONE		500477	C32189	HC-23VIZW77
Unhammet Hun Kauluz- uhammad Munir Chaudry, Pt.D. esident	NUTRITION COLUMN	This Certificate is valid until <b>January 31, 2025</b>	and subject to renewal at that time.	MEMBER Page 1 of



Vigon Code: 500477

FEMA #: 3744

Vigon International, LLC. certifies that the above flavor or ingredient is Food Grade in accordance with at least one of the following recognized organizations:

FDA/FEMA GRAS	(Flavor and Extract Manufacturers Assoc. Generally Recognized as Safe)
JECFA	(Joint FAO/WHO Expert Committee on Food Additives)
CoE	(Council of Europe)
FLAVIS	(Assigned by EFSA – European Food Safety Authority)

As a US based company, we have included the FEMA Number on this certificate however, the remaining numbers can be provided upon request. We hereby certify that this flavor or ingredient is safe for its intended use in food.

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

Sincerely,



Vigon Code: 500477

Vigon International, LLC. certifies that the product listed above is declared *natural* and <u>meets</u> the criteria of Naturalness as defined in Section 101.22 (a) (3) of Title 21 of the United States Code of Federal Regulations.

Vigon International, LLC. certifies that the product meets the following criteria:

- Does not contain any artificial flavors
- Is not adulterated or misbranded according to Food and Drug laws

Vigon International, LLC. 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: 500477

\* 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.	
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,

### **Organic Statement**



### Product Name: MASSOIA LACTONE

Vigon Code: 500477

Vigon International, LLC. declares that the product listed above meets the requirements for nonagricultural (non-organic) substances allowed as ingredients in or on processed products labeled as "organic" or "made with organic (specified ingredients or food group(s))" [7 CFR 205.605(a)(9)].

All of the <u>flavor</u> constituents in the natural flavor product named above meet the <u>FDA definition of a natural flavor</u>.

No synthetic solvents were used.

This natural flavor product, including any solvents, carriers, preservatives or other processing aids used or contained therein, was produced and handled <u>without</u> the use of excluded (GMO) methods.

Ionizing radiation as described in 21 CFR 179.26 was **<u>not</u>** used in the processing of this natural flavor product.

This natural flavor product was <u>not</u> derived from products using sewage sludge in their agricultural production.

Sincerely,

Vigon Regulatory Department regulatory@vigon.com Date of Issue: February 20, 2024

Vigon International, LLC.

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: 500477

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**



### Product Name: MASSOIA LACTONE

Vigon Code: 500477

CAS #: 54814-64-1 6-pentyl-5,6-dihydropyran-2-one

100%

Sincerely,

### **Nutritional Statement**



Product Name: MASSOIA LACTONE

Vigon Code: 500477

Vigon International, LLC. certifies that, to the best of our knowledge, the product listed above does not contribute to the nutritional value of flavors due to their extremely low usage levels and therefore falls under the nutritional labeling exemption defined in Section 101.9(a) and (j) of Title 21 of the Code of Federal Regulations.

Sincerely,



Vigon Code: 500477

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: 500477

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: 500477

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: 500477

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: 500477

### 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: 500477

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,



Vigon Code: 500477

Vigon International, LLC. certifies that the product above is <u>not listed</u> on the California's Safe Drinking Water and Toxic Enforcement Act of 1986, also known as Proposition 65.

Sincerely,

### **EU Declaration**



Vigon Code: 500477 Product Name: MASSOIA LACTONE

The product listed above is acceptable and/or approved for use in the European Union. Below is the flavoring status based on European Regulation 2008/1334/EC.

	Flavouring Preparation
~	Natural Flavouring Substance
	Flavouring Substance
	Thermal Process Flavouring
	Smoke Flavouring
	Flavour Precursor
	Other Flavouring
	Not Applicable: Contains no ingredients whose use is intended primarily for flavour.
	Not Permitted: Contains ingredient(s) which are not permitted in flavours in the EU.

Sincerely,

Vigon Regulatory Department regulatory@vigon.com Date of Issue: February 20, 2024

Vigon International, LLC.

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



#### NATURAL FLAVOR PRODUCT QUESTIONNAIRE - NATIONAL ORGANIC PROGRAM USE

The USDA National Organic Program (NOP) allows the use of certain natural (non-synthetic) substances, including flavors, in products labeled as "Organic" or "Made with Organic...(specified ingredients or food groups)" providing they comply with provisions established in the USDA NOP (7 *CFR Part 205*).

The NOP defines **Non-synthetic** (natural) in 7 CFR 205.2: a substance that is derived from mineral, plant or animal matter and does not undergo a synthetic process as defined in section 6502 (21) of the Act (7 U.S.C. 6502(21)). Under the terms of the Act, "**synthetic**" means a substance that is formulated or manufactured by a chemical process or by a process that chemically changes a substance extracted from naturally occurring plant, animal or mineral sources, except that such term shall not apply to substances created by naturally occurring biological processes.

Non-synthetic Flavors authorized under the NOP, Section 205.605 (a)(9) must be from non-synthetic sources only and must not be produced using synthetic solvents, carrier systems or any artificial preservative. In addition, Sections 205.105 (e)(f) respectively prohibit so-called "excluded" methods (GMOs) and ionizing radiation from being used to produce or during the handling of any ingredients or products under the NOP.

**FDA Definition of Natural Flavors** *FDA 21 CFR Part 101.22(a)(3)*: "...**natural flavor** or **natural flavoring** means the essential oil, oleoresin, essence or extractive, protein hydrolysate, distillate, or any product of roasting, heating or enzymolysis, which contains the flavoring constituents derived from a spice, fruit or fruit juice, vegetable or vegetable juice, edible yeast, herb, bark, bud, root, leaf or similar plant material, meat, seafood, poultry, eggs, dairy products, or fermentation products thereof, whose significant function in food is flavoring rather than nutritional. Natural flavors include [*but not exclusively*] the natural essences or extractives obtained from plants listed in §§182.10, 182.20, 182.40, and 182.50 and part 184 of this chapter, and the substances listed in §172.510 of this chapter."

In order to approve the use of a natural flavor used in an "organic" or "made with" product, QAI requests the information below in order to determine compliance under the terms of the NOP. <u>QAI may request additional information as needed.</u>

#### Identification of Natural Flavor Product (Name/code): MASSOIA LACTONE/500477

Supplier Name and Address: Vigon International, LLC. 127 Airport Road East Stroudsburg, PA 18301 USA

Type of flavor (select one or more as necessary):

Protein Hydrolysate	Extracts		Essential oil
Compounded flavor	Oleoresin		Isolate
Distillate	Compounded WONF	X	Other

#### Natural Flavor Product

#### A. Flavor constituents

1. Do all of the <u>flavor</u> constituents in the natural flavor product named above meet the <u>FDA definition of a natural flavor (see above)</u>?

X Yes No

2. Natural flavors authorized for use in NOP "organic" or "made with organic" products, <u>in addition</u>, must not be produced using synthetic extraction solvents. Extraction may only use natural, non-petroleum based solvents. Is/are the natural flavor constituent(s) made using NOP-suitable extraction solvents?\*
 Yes
 No
 N/A, no extraction solvents used

#### AESOP 9603; ISSUE 1; STATUS-PUBLISHED; EFFECTIVE 19 JUN 2009; AUTHORITY JACLYN M. BOWEN1 of 2

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Please list any solvent(s) used in the production of this Natural Flavor Product: > NONE

\*Allowed natural extraction solvents include water, natural ethanol, super-critical carbon dioxide, authentic essential oil, and natural vegetable oils. No hydrocarbon solvents, or chlorinated, or halogenated solvents may be used. Propane, hexane, and freon are examples of solvents that are prohibited.

#### **B.** Non-flavor constituents and other ingredients

Natural flavors authorized for use in NOP "organic" or "made with organic" products must not contain any synthetic carrier systems or any artificial preservatives, including but not limited to, propylene glycol, polyglycerol esters of fatty acids, mono- and di-glycerides, benzoic acid, polysorbate 80.

> Please list any carrier system(s) used in this Natural Flavor Product or attach an Ingredient Statement:

_ 2	XN/A,	no	carrier	system(s)	used
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Please list any preservative(s) used in this Natural Flavor Product or attach an Ingredient Statement:

**X**N/A, no preservative(s) used

C. Genetically Modified Organism (GMO) products may not be used at any stage in the process of making natural flavor products for NOP goods. Excluded methods (= GMO use) include a variety of methods used to genetically modify organisms or influence their growth and development by means that are not possible under natural conditions or processes and are not considered compatible with organic production. Such methods include, but are not limited to, recombinant DNA technology (including gene deletion, gene doubling, introduction of a foreign gene, and changing the positions of genes when achieved by recombinant DNA technology); therefore, GMO-plant extracts may not be used nor may natural flavors be the product of GMO-yeast fermentation.

- > This natural flavor product, including any solvents, carriers, preservatives or other processing aids used or contained therein, was produced and handled without the use of excluded (GMO) methods? X Yes No
- **D.** Ionizing Radiation is prohibited for all uses involving food preservation, pest control and pathogen control in NOP products. Other radiation uses, including food inspection, are permitted providing such use meets applicable FDA regulations, which establish limitations applicable to all (organic and non-organic) food products.
  - > Ionizing radiation as described in 21 CFR 179.26 was **not** used in the processing of this natural flavor product? X Yes No

Please sign this questionnaire below

Pursuant to 7CFR §205.605(a)(9) and §205.105(e)(f), I, on behalf of the supplier, hereby attest that the information provided in this form is accurate and truthful to the best of my knowledge.

Company Name: Vigon International LLC.

Printed Name: Amanda Moyer Title: Manager of Regulatory

Signature: <u>Amancla Muyur</u> Date: 02/20/24

AESOP 9603; ISSUE 1; STATUS-PUBLISHED; EFFECTIVE 19 JUN 2009; AUTHORITY JACLYN M. BOWENPage 2 of 2

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### Nanomaterials



### Product Name: MASSOIA LACTONE

Vigon Code: 500477

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: 500477

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: 500477

We certify that the above material contains the following restricted substance restricted by IFRA Standards: prohibited Massoia Lactone (CAS 54814-64-1) 100%

- is in compliance with the Standards of the INTERNATIONAL FRAGRANCE ASSOCIATION (IFRA 51th 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.

### **Botanical Species**



Product Name: MASSOIA LACTONE

Vigon Code: 500477

**Botanical Species: Not specified** 

Part of plant used: Not specified

Country of origin for the plant: Not specified

Sincerely,



### Vigon Code: 500477

Country(s) or region	Inventory name C	On 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)	s Yes	
United States & Puerto Rico	Toxic Substances and Control Act (TSCA) Inventory	Yes	

Sincerely,

### **Residual Solvents**



### Product Name: MASSOIA LACTONE

### Vigon Code: 500477

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: 500477

The product listed above is in compliance with the European Directive 76/768/EEC established by the SCCNFP declared allergens. This product is free of these fragrance allergens.

Sincerely,

### **Melamine Statement**



Product Name: MASSOIA LACTONE

Vigon Code: 500477

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: MASSOIA LACTONE

Vigon Code: 500477

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,

### **ISO 9235 Statement**



### Product Name: MASSOIA LACTONE

Vigon Code: 500477

The product listed above is natural according to ISO 9235 definition below:

Natural Raw Material

Sincerely,

127 Air	nternational, LLC. port Road rroudsburg, PA 18301-9	9629 USA	Country of Origin:	USA	NON
PASSION FOR SIMPLICITY +1.570.476.6300   sales@vige			6-pe Chemical Name:	entyl-5,6-dihydro pyran-2-one	
			CAS#:	54814-64-1	
MASSOIA LA	4610	INC	Flash Point:	199°F (93°C)	
			Allergens:	NONE	
Code: 500477 ID #: E	XAMPLI	E	Liters:	0.000	
Approx. Gross:	<b>KG</b> 0.000	LB 0.000	Produced on:	N/A	
Approx. Tare:	0.000	0.000	Best used before:	N/A	
Net:	0.000	0.000	Lot #:	EXAMPLE	
STORAGE CONDITIONS: Stable when stored in its original package, tightly sealed in					1

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

INSTRUCTIONS FOR USE: Ask your employer for guidance regarding the safe use and handling of this product in your specific workplace environment based on the information provided in Vigon's Safety Data Sheet (SDS).

H A Z A R D S T A T E M E N T : Combustible liquid. Causes skin irritation. Causes skin and eye irritation. May cause an allergic skin reaction. Causes serious eye irritation.P R E C A U T I O N A R Y S T A T E M E N T : -PREVENTION- Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Wash thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace. Wear protective gloves/protective clothing/eye protection/face protection.-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. 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.-STORAGE- Store in a well-ventilated place.-DISPOSAL- Dispose of contents/container in accordance with local/regional/national/international regulations.

