Product Specification

**Product Name:** MENTHYL LACTATE CRYSTALS

**Vigon Code:** 502675

**CAS Number:** 17162-29-7

**FEMA Number:**

---

**Characteristic:**

<table>
<thead>
<tr>
<th><strong>Specification</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Acid Value</strong></td>
</tr>
<tr>
<td><strong>Assay (sum Of Isomers)%</strong></td>
</tr>
<tr>
<td><strong>Gas Chromatograph</strong></td>
</tr>
<tr>
<td><strong>Optical Rotation (@20c)</strong></td>
</tr>
<tr>
<td><strong>Odor</strong></td>
</tr>
<tr>
<td><strong>Solidification Point (°c)</strong></td>
</tr>
<tr>
<td><strong>Color/appearance</strong></td>
</tr>
</tbody>
</table>

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**Additional Product Information:**

**Flash Point:** >200 °F

**Shelf Life:** 36 Months

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

**Effective Date:** March 1, 2012

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**Printed Date:** February 5, 2020
1. IDENTIFICATION

Product Description: MENTHYL LACTATE CRYSTALS

CAS # 17162-29-7

Other means of identification

Vigon Item # 502675

Recommended use Concentrated aromatic and flavor ingredient which may be used in flavor and fragrance compounds according to legal and IFRA or FEMA GRAS/FDA guidelines. Cosmetic material for FDA regulated product use.

Recommended restrictions 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

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 Not classified.

Environmental hazards Not classified.

Label elements

Hazard symbol None.

Signal word None.

Hazard statement The substance does not meet the criteria for classification.

Precautionary statement

Prevention Observe good industrial hygiene practices.

Response Wash hands after handling.

Storage Store away from incompatible materials.
SAFETY DATA SHEET
502675 MENTHYL LACTATE CRYSTALS

3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>Common name and synonyms</th>
<th>CAS number</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>MENTHYL LACTATE</td>
<td>Propanoic acid, 2-hydroxy-5-methyl-2-(1-methylethyl)cyclohexyl ester</td>
<td>17162-29-7</td>
<td>100</td>
</tr>
</tbody>
</table>

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**
Dusts may irritate the respiratory tract, skin and eyes.

**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.

5. FIRE-FIGHTING MEASURES

**Suitable extinguishing media**
Water spray, fog, CO2, dry chemical, or alcohol resistant foam.

**Unsuitable extinguishing media**
Do not use a solid water stream as it may scatter and spread fire.

**Specific hazards arising from the chemical**
Explosion hazard: Avoid generating dust; fine dust dispersed in air in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard. Fire may produce irritating, corrosive and/or toxic gases.

**Supplemental information**
100% of the substance consists of component(s) of unknown acute inhalation toxicity.

**Disposal**
Dispose of waste and residues in accordance with local authority requirements.

**Hazard(s) not otherwise classified (HNOC)**
WARNING! May form combustible dust concentrations in air. Avoid breathing dust.
# SAFETY DATA SHEET

## 502675 MENTHYL LACTATE CRYSTALS

<table>
<thead>
<tr>
<th>Special protective equipment and precautions for firefighters</th>
<th>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.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fire fighting equipment/instructions</td>
<td>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.</td>
</tr>
<tr>
<td>Specific methods</td>
<td>Use water spray to cool unopened containers.</td>
</tr>
<tr>
<td>General fire hazards</td>
<td>Static charges generated by emptying package in or near flammable vapor may cause flash fire.</td>
</tr>
</tbody>
</table>

## 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

Sweep up and place in a clearly labeled container for chemical waste. Wash contaminated area with water. Collect and dispose of spillage as indicated in section 13 of the SDS. 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). Use only non-sparking tools. Avoid the generation of dusts during clean-up.

Never return spills in original containers for re-use.

### 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

Take precautionary measures against static discharges when there is a risk of dust explosion. Minimize dust generation and accumulation. Routine housekeeping should be instituted to ensure that dusts do not accumulate on surfaces. Dry powders can build static electricity charges when subjected to the friction of transfer and mixing operations. Provide adequate precautions, such as electrical grounding and bonding, or inert atmospheres. Do not handle or store near an open flame, heat or other sources of ignition. Assume that this material is capable of producing a dust explosion if ignited as a dust cloud.

Take precautionary measures against static discharges. Avoid breathing vapor. Avoid breathing dust. 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

This substance has no PEL, TLV, or other recommended exposure limit.

### Biological limit values

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

502675 MENTHYL LACTATE CRYSTALS

Appropriate engineering controls
Use explosion-proof ventilation equipment to stay below exposure limits. It is recommended that all dust control equipment such as local exhaust ventilation and material transport systems involved in handling of this product contain explosion relief vents or an explosion suppression system or an oxygen-deficient environment. Ensure that dust-handling systems (such as exhaust ducts, dust collectors, vessels, and processing equipment) are designed in a manner to prevent the escape of dust into the work area (i.e., there is no leakage from the equipment). Use only appropriately classified electrical equipment and powered industrial trucks. 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).

Skin protection
Chemical resistant gloves.

Hand protection

Other
Wear suitable protective clothing.

Respiratory protection
Dust mask.

Thermal hazards
Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations
When using, do not eat, drink or 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.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance
Refer to Spec Sheet

Physical state
Powder/Crystal.

Form
Powder. Crystalline powder.

Color
Refer to Spec Sheet

Odor
Characteristic.

Odor threshold
Not available.

pH
Not available.

Melting point/freezing point
107.6 °F (42 °C) Setting point

Initial boiling point and boiling range

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

Evaporation rate
Not available.

Flammability (solid, gas)
Not available.

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
< 0.1 mbar at 20 °C
0.00009 mm Hg at 25 °C
Vapor density 7.9
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
  Bulk density 1042 kg/m³ at 20 °C
  Explosive properties Not explosive.
  Flammability class Combustible IIB estimated
  Molecular formula C13H24O3
  Molecular weight 228.33 g/mol
  Oxidizing properties Not oxidizing.

10. STABILITY AND REACTIVITY
Reactivity The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical stability Material is stable under normal conditions.
Possibility of hazardous reactions No dangerous reaction known under conditions of normal use.
Conditions to avoid Keep away from heat, sparks and open flame. Avoid temperatures exceeding the flash point. Contact with incompatible materials. Minimize dust generation and accumulation.
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 Irritating to respiratory system.
  Skin contact Causes mild skin irritation.
  Eye contact Dust may irritate the eyes. Causes mild eye irritation.
  Ingestion Expected to be a low ingestion hazard.
Symptoms related to the physical, chemical and toxicological characteristics
  Dusts may irritate the respiratory tract, skin and eyes.
Information on toxicological effects
  Acute toxicity Not known.
SAFETY DATA SHEET

502675 MENTHYL LACTATE CRYSTALS

Revision Date: 09-03-2019
Version # 05

<table>
<thead>
<tr>
<th>Product</th>
<th>Species</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>MENTHYL LACTATE (CAS 17162-29-7)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acute</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dermal</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LD50</td>
<td>Rabbit</td>
<td>&gt; 10000 mg/kg OECD Test Guideline 402</td>
</tr>
<tr>
<td>Oral</td>
<td>Rat</td>
<td>&gt; 5000 mg/kg OECD Test Guideline 401</td>
</tr>
<tr>
<td>Skin corrosion/irritation</td>
<td>Due to partial or complete lack of data the classification is not possible. Humans: No skin irritation @ 50 %</td>
<td></td>
</tr>
<tr>
<td>Serious eye damage/eye irritation</td>
<td>Due to partial or complete lack of data the classification is not possible. rabbit: No eye irritation @ 50 %</td>
<td></td>
</tr>
<tr>
<td>Respiratory or skin sensitization</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Respiratory sensitization</td>
<td>Due to partial or complete lack of data the classification is not possible.</td>
<td></td>
</tr>
<tr>
<td>Skin sensitization</td>
<td>Due to partial or complete lack of data the classification is not possible. Humans: No sensitizing effect. @ 50 %</td>
<td></td>
</tr>
<tr>
<td>Germ cell mutagenicity</td>
<td>Not mutagenic in Ames Test. Due to partial or complete lack of data the classification is not possible.</td>
<td></td>
</tr>
<tr>
<td>Carcinogenicity</td>
<td>Due to partial or complete lack of data the classification is not possible.</td>
<td></td>
</tr>
<tr>
<td>IARC Monographs. Overall Evaluation of Carcinogenicity</td>
<td>Not listed.</td>
<td></td>
</tr>
<tr>
<td>US. National Toxicology Program (NTP) Report on Carcinogens</td>
<td>Not listed.</td>
<td></td>
</tr>
<tr>
<td>Reproductive toxicity</td>
<td>Due to partial or complete lack of data the classification is not possible.</td>
<td></td>
</tr>
<tr>
<td>Specific target organ toxicity - single exposure</td>
<td>Due to partial or complete lack of data the classification is not possible.</td>
<td></td>
</tr>
<tr>
<td>Specific target organ toxicity - repeated exposure</td>
<td>Due to partial or complete lack of data the classification is not possible.</td>
<td></td>
</tr>
<tr>
<td>Aspiration hazard</td>
<td>Due to partial or complete lack of data the classification is not possible.</td>
<td></td>
</tr>
</tbody>
</table>

12. ECOLOGICAL INFORMATION

Ecotoxicity
The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

<table>
<thead>
<tr>
<th>Product</th>
<th>Species</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>MENTHYL LACTATE (CAS 17162-29-7)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aquatic</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Crustacea</td>
<td>EC50</td>
<td>Daphnia magna</td>
</tr>
<tr>
<td>Fish</td>
<td>LC50</td>
<td>Zebra danio (Danio rerio)</td>
</tr>
<tr>
<td>Other</td>
<td>EC50</td>
<td>Activated Sludge</td>
</tr>
</tbody>
</table>
Persistence and degradability: readily biodegradable (OECD-classification) with 100 %/28 d, Modified OECD screening test.

Bioaccumulative potential: No data available.

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 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.

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.

DOT: Not regulated as dangerous goods.

NON-BULK: Not regulated as dangerous goods.

IATA: Not regulated as dangerous goods.

IMDG: Not regulated as dangerous goods.

15. REGULATORY INFORMATION

US federal regulations: This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

Toxic Substances Control Act (TSCA)
SAFETY DATA SHEET
502675 MENTHYL LACTATE CRYSTALS

Revision Date: 09-03-2019
Version # 05
Page 8 of 9
Print Date: 09-03-2019

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
Yes

Classified hazard categories
Combustible dust

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, INCLUDING DATE OF PREPARATION OR LAST REVISION

Issue date 09-03-2019
Revision date 09-03-2019
Version # 05

Further information
Refer to NFPA 654, Standard for the Prevention of Fire and Dust Explosions from the Manufacturing, Processing, and Handling of Combustible Particulate Solids, for safe handling.

HMIS® ratings
Health: 1
Flammability: 1
Physical hazard: 0
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.

This document has undergone significant changes and should be reviewed in its entirety.
The following product(s) Manufactured By VIGON INTERNATIONAL, INC are certified kosher with the listed restrictions.

<table>
<thead>
<tr>
<th>Product Code</th>
<th>Product Name</th>
<th>Status</th>
<th>Restriction</th>
<th>UKD#</th>
</tr>
</thead>
<tbody>
<tr>
<td>502675</td>
<td>Menthyl Lactate Crystals</td>
<td>Parve</td>
<td>Kof-K symbol required</td>
<td>KFH0EVNHFC6</td>
</tr>
</tbody>
</table>

To verify or for the most up to date certificate please go to www.koshercertificate.com

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.
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 15, 2019  
**Document #:** 6718.12506.II195219

<table>
<thead>
<tr>
<th>ProductName</th>
<th>Product Code</th>
<th>Halal-ID</th>
<th>Product Certificate #</th>
</tr>
</thead>
<tbody>
<tr>
<td>MENTHYL LACTATE CRYSTALS</td>
<td>502675</td>
<td>A14739</td>
<td>HC-19VI6M79</td>
</tr>
</tbody>
</table>

Company Name & Address: Vigon International, Inc. 127 Airport Road East Stroudsburg, Pennsylvania 18301 USA

Muhammad Munir Chaudry, Ph.D.  
President

This Certificate is valid until **January 31, 2021** and subject to renewal at that time.
Food Grade Certification

Product Name: MENTHYL LACTATE CRYSTALS

Vigon Code: 502675
FEMA #:  

Vigon International, Inc. certifies that the above flavor or ingredient is FDA/FEMA GRAS. We would like to assure you that we use only flavor ingredients that are listed as being generally recognized as safe (GRAS) on a reliable published industry association (FEMA) list and/or are approved for use in a regulation of the U.S. Food and Drug Administration. We hereby certify that this flavor or ingredient is safe for its intended use in food.

Vigon International, Inc. 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,

Amanda Moyer  
Product Documentation Coordinator  
Date of Issue: February 5, 2020
Allergen/Sensitive Agents Identification Sheet

Product Name: MENTHYL LACTATE CRYSTALS

Vigon Code: 502675

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

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

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

Sincerely,

Amanda Moyer
Product Documentation Coordinator
Date of Issue: February 5, 2020
GMO Status Statement

Product Name: MENTHYL LACTATE CRYSTALS

Vigon Code: 502675

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

Sincerely,

Amanda Moyer
Product Documentation Coordinator
Date of Issue: February 5, 2020
Ingredient Statement

Product Name: MENTHYL LACTATE CRYSTALS

Vigon Code: 502675

CAS #: 17162-29-7 (5-methyl-2-propan-2-ylcyclohexyl) 2-hydroxypropanoate 100%

Vigon Regulatory Department
Date of Issue: February 5, 2020
Irradiation and Sewage Sludge Statement

Product Name: MENTHYL LACTATE CRYSTALS

Vigon Code: 502675

Vigon International, Inc. declares that the product listed above has not been:

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

Vigon International, Inc. 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,

Amanda Moyer
Product Documentation Coordinator
Date of Issue: February 5, 2020
Vigon International, Inc. 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,

Amanda Moyer
Product Documentation Coordinator
Date of Issue: February 5, 2020
Continuing Product Guarantee

Product Name: MENTHYL LACTATE CRYSTALS

Vigon Code: 502675

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

The article(s) comprising each shipment or other delivery hereafter made by Vigon International, Inc. 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,

Amanda Moyer
Product Documentation Coordinator
Date of Issue: February 5, 2020
Dietary Preferences & Restrictions

Product Name: MENTHYL LACTATE CRYSTALS

Vigon Code: 502675

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

<table>
<thead>
<tr>
<th>Dietary Preference</th>
<th>Suitable?</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Vegans</strong></td>
<td>✔</td>
</tr>
<tr>
<td>Do not eat meat, poultry, fish/seafood, eggs, dairy products, honey</td>
<td>✔</td>
</tr>
<tr>
<td><strong>Lacto-Vegetarians</strong></td>
<td>✔</td>
</tr>
<tr>
<td>Do not eat meat, poultry, fish/seafood, eggs, but do eat dairy products</td>
<td>✔</td>
</tr>
<tr>
<td><strong>Ovo-Vegetarians</strong></td>
<td>✔</td>
</tr>
<tr>
<td>Do not eat meat, poultry, fish/seafood, dairy products, but do eat eggs</td>
<td>✔</td>
</tr>
<tr>
<td><strong>Vegetarians</strong></td>
<td>✔</td>
</tr>
<tr>
<td>Do not eat meat, poultry, fish/seafood, but do eat dairy products and eggs</td>
<td>✔</td>
</tr>
</tbody>
</table>

Sincerely,

Amanda Moyer
Product Documentation Coordinator
Date of Issue: February 5, 2020
Vigon International, Inc. 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. However, some ingredients used in our products have been subjected to animal testing by the academic community, government agencies, or within the chemical industry.

Sincerely,

Amanda Moyer
Product Documentation Coordinator
Date of Issue: February 5, 2020
Proposition 65 Statement

Product Name: MENTHYL LACTATE CRYSTALS

Vigon Code: 502675

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

Sincerely,

Amanda Moyer
Product Documentation Coordinator
Date of Issue: February 5, 2020
Product Name: MENTHYL LACTATE CRYSTALS

Vigon Code: 502675

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 produced 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 100 nm but retain properties that are characteristic of the nanoscale.

Vigon Regulatory Department
Date of Issue: February 5, 2020
Transmissible Spongiform Encephalopathy (TSE) and Bovine Spongiform Encephalopathy (BSE) Statement

Product Name: MENTHYL LACTATE CRYSTALS

Vigon Code: 502675

Vigon International, Inc. 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, Inc. 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.

Vigon Regulatory Department
Date of Issue: February 5, 2020