

## 0630 - Pistachio Flavor, Natural/Artificial Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Date of issue: 10/31/2019

Version: 4

### SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1. Product identifier

Product name : 0630 - Pistachio Flavor, Natural/Artificial  
Product form : Mixture

#### 1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture : Food industry: component

#### 1.3. Details of the supplier of the safety data sheet

LorAnn Oils, Inc.  
4518 Aurelius Road  
Lansing, MI 48910  
Telephone: 1.800.862.8620

#### 1.4. Emergency telephone number

Emergency number : CHEMTREC: Within USA and Canada: 1.800.424.9300 Outside USA and Canada: +1 703 527 3887

### SECTION 2: Hazards identification

#### 2.1. Classification of the substance or mixture

##### GHS-US classification

Flam. Liq. 4 H227  
Skin Sens. 1 H317

Full text of H statements : see section 16

#### 2.2. Label elements

##### GHS-US labeling

Hazard pictograms (GHS-US) :



GHS07

Signal word (GHS-US) :

Warning

Hazard statements (GHS-US) :

Combustible liquid  
May cause an allergic skin reaction

Precautionary statements (GHS-US) :

Keep away from heat source and sparks . No smoking near container.  
Avoid breathing fumes  
Contaminated work clothing must not be allowed out of the workplace  
Wear eye protection and protective gloves.  
IF ON SKIN: Wash with plenty of soap and water  
Specific treatment (see Safety Data Sheet)  
If skin irritation or rash occurs: Get medical advice/attention  
Wash contaminated clothing before reuse  
In case of fire: Use ABC-powder to extinguish  
Store in a well-ventilated place. Keep cool  
Dispose of contents/container to an approved waste disposal plant

#### 2.3. Other hazards

No additional information available

#### 2.4. Unknown acute toxicity (GHS US)

Not applicable

## SECTION 3: Composition/Information on ingredients

### 3.1. Substances

Not applicable

### 3.2. Mixtures

| Name                                 | %               | GHS-US classification                                                           |
|--------------------------------------|-----------------|---------------------------------------------------------------------------------|
| Proprietary Flavor Ingredient - P226 | 16.847 - 20.293 | Flam. Liq. 4, H227<br>Acute Tox. 4 (Oral), H302<br>Aquatic Acute 3, H402        |
| Proprietary Flavor Ingredient - P222 | 0.397 - 0.479   | Flam. Liq. 2, H225<br>Eye Dam. 1, H318<br>Skin Sens. 1, H317<br>STOT RE 2, H373 |

\*The specific chemical identities of the ingredients in this mixture, as well as, exact concentrations of any hazardous ingredients stated above, are considered trade secrets. This information is withheld in accordance with the provisions of 1910.1200 of the Code of Federal Regulations.

Full text of H-phrases: see section 16

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

- First-aid measures general : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).
- First-aid measures after inhalation : Allow victim to breathe fresh air. Allow the victim to rest.
- First-aid measures after skin contact : Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse. Wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice/attention. Specific treatment (see Safety Data Sheet). Wash contaminated clothing before reuse.
- First-aid measures after eye contact : Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness persists.
- First-aid measures after ingestion : Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.

### 4.2. Most important symptoms and effects, both acute and delayed

- Symptoms/effects after inhalation : May cause an allergic skin reaction.

### 4.3. Indication of any immediate medical attention and special treatment needed

No additional information available

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

- Suitable extinguishing media : Foam. Dry powder. Carbon dioxide. Water spray. Sand.
- Unsuitable extinguishing media : Do not use a heavy water stream.

### 5.2. Special hazards arising from the substance or mixture

- Fire hazard : Combustible liquid.
- Explosion hazard : May form flammable/explosive vapor-air mixture.

### 5.3. Advice for firefighters

- Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire-fighting water from entering environment.
- Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

- General measures : Remove ignition sources. Use special care to avoid static electric charges. No open flames. No smoking.

#### 6.1.1. For non-emergency personnel

- Emergency procedures : Evacuate unnecessary personnel.

## 6.1.2. For emergency responders

Protective equipment : Equip cleanup crew with proper protection.  
Emergency procedures : Ventilate area.

## 6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

## 6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials.

## 6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

Additional hazards when processed : Handle empty containers with care because residual vapors are flammable. Keep away from heat source and sparks . No smoking near container.  
Precautions for safe handling : Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapor. No open flames. No smoking. Avoid breathing fumes.  
Hygiene measures : Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse.

### 7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Proper grounding procedures to avoid static electricity should be followed.  
Storage conditions : Keep only in the original container in a cool, well ventilated place away from : Keep container closed when not in use. Keep in fireproof place.  
Incompatible products : Strong bases. Strong acids.  
Incompatible materials : Sources of ignition. Direct sunlight. Heat sources.

### 7.3. Specific end use(s)

No additional information available

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

| 0630 - Pistachio Flavor, Natural/Artificial |                |
|---------------------------------------------|----------------|
| ACGIH                                       | Not applicable |
| OSHA                                        | Not applicable |
| Proprietary Flavor Ingredient - P226        |                |
| ACGIH                                       | Not applicable |
| OSHA                                        | Not applicable |
| Proprietary Flavor Ingredient - P222        |                |
| ACGIH                                       | Not applicable |
| OSHA                                        | Not applicable |

### 8.2. Exposure controls

Personal protective equipment : Avoid all unnecessary exposure.  
  
Hand protection : Wear eye protection and protective gloves. protective gloves.  
Eye protection : Chemical goggles or safety glasses.  
Respiratory protection : Wear appropriate mask.  
Other information : Do not eat, drink or smoke during use.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

|                                             |                                |
|---------------------------------------------|--------------------------------|
| Physical state                              | : Liquid                       |
| Color                                       | : Refer to specification sheet |
| Odor                                        | : characteristic               |
| Odor threshold                              | : No data available            |
| pH                                          | : No data available            |
| Relative evaporation rate (butyl acetate=1) | : No data available            |
| Melting point                               | : No data available            |
| Freezing point                              | : No data available            |
| Boiling point                               | : > 100 °F                     |
| Flash point                                 | : 143.9 °F                     |
| Auto-ignition temperature                   | : No data available            |
| Decomposition temperature                   | : No data available            |
| Flammability (solid, gas)                   | : No data available            |
| Vapor pressure                              | : No data available            |
| Relative vapor density at 20 °C             | : No data available            |
| Relative density                            | : No data available            |
| Specific gravity / density                  | : 1.0435                       |
| Solubility                                  | : Soluble in oil.<br>Water: No |
| Log Pow                                     | : No data available            |
| Log Kow                                     | : No data available            |
| Viscosity, kinematic                        | : No data available            |
| Viscosity, dynamic                          | : No data available            |
| Explosive properties                        | : No data available            |
| Oxidizing properties                        | : No data available            |
| Explosion limits                            | : No data available            |

### 9.2. Other information

No additional information available

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

No additional information available

### 10.2. Chemical stability

Combustible liquid. May form flammable/explosive vapor-air mixture.

### 10.3. Possibility of hazardous reactions

Not established.

### 10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures. Open flame. Overheating. Heat. Sparks.

### 10.5. Incompatible materials

Strong acids. Strong bases.

### 10.6. Hazardous decomposition products

fume. Carbon monoxide. Carbon dioxide. May release flammable gases.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

Acute toxicity : Not classified

| Proprietary Flavor Ingredient - P226 |                        |
|--------------------------------------|------------------------|
| LD50 oral rat                        | 1300 mg/kg (Rat)       |
| LD50 dermal rat                      | > 1250 mg/kg (Rat)     |
| LD50 dermal rabbit                   | 5000 mg/kg (Rabbit)    |
| ATE US (oral)                        | 1300 mg/kg body weight |
| ATE US (dermal)                      | 5000 mg/kg body weight |

| Proprietary Flavor Ingredient - p322 |                                          |
|--------------------------------------|------------------------------------------|
| LD50 oral rat                        | 20000 mg/kg (Rat; Experimental value)    |
| LD50 dermal rat                      | 22500 mg/kg (Rat; Experimental value)    |
| LD50 dermal rabbit                   | 20800 mg/kg (Rabbit; Experimental value) |
| ATE US (oral)                        | 20000 mg/kg body weight                  |
| ATE US (dermal)                      | 20800 mg/kg body weight                  |

| Proprietary Flavor Ingredient - P124 |                        |
|--------------------------------------|------------------------|
| LD50 oral rat                        | 2700 mg/kg (Rat)       |
| LD50 dermal rat                      | > 5000 mg/kg (Rat)     |
| ATE US (oral)                        | 2700 mg/kg body weight |

| Proprietary Flavor Ingredient - P280 |                        |
|--------------------------------------|------------------------|
| LD50 oral rat                        | 2800 mg/kg (Rat)       |
| LD50 dermal rabbit                   | > 5010 mg/kg (Rabbit)  |
| ATE US (oral)                        | 2800 mg/kg body weight |

| Proprietary Flavor Ingredient - p324 |                                                                                  |
|--------------------------------------|----------------------------------------------------------------------------------|
| LD50 oral rat                        | 10740 mg/kg body weight (Rat; OECD 401: Acute Oral Toxicity; Experimental value) |
| LD50 dermal rabbit                   | > 16000 mg/kg (Rabbit; Literature study)                                         |
| ATE US (oral)                        | 10740 mg/kg body weight                                                          |

| Proprietary Flavor Ingredient - P222 |                        |
|--------------------------------------|------------------------|
| LD50 oral rat                        | 3000 mg/kg (Rat)       |
| LD50 dermal rat                      | > 2500 mg/kg           |
| ATE US (oral)                        | 3000 mg/kg body weight |

Skin corrosion/irritation : Not classified  
 Serious eye damage/irritation : Not classified  
 Respiratory or skin sensitization : May cause an allergic skin reaction.  
 Germ cell mutagenicity : Not classified  
 Carcinogenicity : Not classified

Reproductive toxicity : Not classified  
 Specific target organ toxicity – single exposure : Not classified

Specific target organ toxicity – repeated exposure : Not classified

Aspiration hazard : Not classified  
 Potential Adverse human health effects and symptoms : Based on available data, the classification criteria are not met.

Symptoms/effects after inhalation : May cause an allergic skin reaction.

## SECTION 12: Ecological information

### 12.1. Toxicity

| Proprietary Flavor Ingredient - P226 |                                                                                                            |
|--------------------------------------|------------------------------------------------------------------------------------------------------------|
| EC50 Daphnia 1                       | 50 mg/l (EC50; 24 h)                                                                                       |
| LC50 fish 2                          | 11.2 mg/l (LC50; 96 h; Salmo gairdneri)                                                                    |
| Proprietary Flavor Ingredient - p322 |                                                                                                            |
| EC50 Daphnia 1                       | 34400 mg/l (EC50; 48 h)                                                                                    |
| LC50 fish 2                          | 51600 mg/l (LC50; OECD 203: Fish, Acute Toxicity Test; 96 h; Oncorhynchus mykiss)                          |
| Proprietary Flavor Ingredient - P280 |                                                                                                            |
| LC50 fish 1                          | 115 (100 - 131) mg/l (24 h; Pimephales promelas)                                                           |
| EC50 Daphnia 1                       | 180 mg/l (EC50; 24 h)                                                                                      |
| LC50 fish 2                          | 105 (88 - 121) mg/l (96 h; Pimephales promelas)                                                            |
| Threshold limit algae 1              | 2 mg/l (EC0; 72 h)                                                                                         |
| Proprietary Flavor Ingredient - p324 |                                                                                                            |
| LC50 fish 1                          | 14200 mg/l (LC50; US EPA; 96 h; Pimephales promelas; Flow-through system; Fresh water; Experimental value) |

### 12.2. Persistence and degradability

| 0630 - Pistachio Flavor, Natural/Artificial |                                                                                         |
|---------------------------------------------|-----------------------------------------------------------------------------------------|
| Persistence and degradability               | Not established.                                                                        |
| Proprietary Flavor Ingredient - P226        |                                                                                         |
| Persistence and degradability               | Readily biodegradable in water. Biodegradable in the soil.                              |
| Biochemical oxygen demand (BOD)             | 1.62 g O <sub>2</sub> /g substance                                                      |
| Chemical oxygen demand (COD)                | 1.98 g O <sub>2</sub> /g substance                                                      |
| ThOD                                        | 2.42 g O <sub>2</sub> /g substance                                                      |
| BOD (% of ThOD)                             | 0.67                                                                                    |
| Proprietary Flavor Ingredient - p322        |                                                                                         |
| Persistence and degradability               | Readily biodegradable in water. Biodegradable in the soil.                              |
| Biochemical oxygen demand (BOD)             | 0.96 - 1.08 g O <sub>2</sub> /g substance                                               |
| Chemical oxygen demand (COD)                | 1.63 g O <sub>2</sub> /g substance                                                      |
| ThOD                                        | 1.69 g O <sub>2</sub> /g substance                                                      |
| BOD (% of ThOD)                             | 0.57                                                                                    |
| Proprietary Flavor Ingredient - P124        |                                                                                         |
| Persistence and degradability               | Readily biodegradable in water. Biodegradable in the soil. Photodegradation in the air. |
| ThOD                                        | 1.71 g O <sub>2</sub> /g substance                                                      |
| Proprietary Flavor Ingredient - P280        |                                                                                         |
| Persistence and degradability               | Inherently biodegradable.                                                               |
| Proprietary Flavor Ingredient - p324        |                                                                                         |
| Persistence and degradability               | Readily biodegradable in water. Biodegradable in the soil. Highly mobile in soil.       |
| Biochemical oxygen demand (BOD)             | 0.8 - 0.967 g O <sub>2</sub> /g substance                                               |
| Chemical oxygen demand (COD)                | 1.7 g O <sub>2</sub> /g substance                                                       |
| ThOD                                        | 2.1 g O <sub>2</sub> /g substance                                                       |
| BOD (% of ThOD)                             | 0.43                                                                                    |
| Proprietary Flavor Ingredient - P222        |                                                                                         |
| Persistence and degradability               | Biodegradability in water: no data available.                                           |

## 12.3. Bioaccumulative potential

|                                                    |                                                                                                                  |
|----------------------------------------------------|------------------------------------------------------------------------------------------------------------------|
| <b>0630 - Pistachio Flavor, Natural/Artificial</b> |                                                                                                                  |
| Bioaccumulative potential                          | Not established.                                                                                                 |
| <b>Proprietary Flavor Ingredient - P226</b>        |                                                                                                                  |
| BCF other aquatic organisms 1                      | 4.2 - 7.8 (BCF)                                                                                                  |
| Log Pow                                            | 1.48 (Experimental value)                                                                                        |
| Bioaccumulative potential                          | Low potential for bioaccumulation (Log Kow < 4).                                                                 |
| <b>Proprietary Flavor Ingredient - p322</b>        |                                                                                                                  |
| Log Pow                                            | -1.41 - -0.30 (-0.92; Experimental value; -1.07; Experimental value; Equivalent or similar to OECD 107; 20.5 °C) |
| Bioaccumulative potential                          | Not bioaccumulative.                                                                                             |
| <b>Proprietary Flavor Ingredient - P124</b>        |                                                                                                                  |
| Log Pow                                            | 1.05                                                                                                             |
| Bioaccumulative potential                          | Low potential for bioaccumulation (Log Kow < 4).                                                                 |
| <b>Proprietary Flavor Ingredient - P280</b>        |                                                                                                                  |
| Log Pow                                            | 1.21 - 1.37                                                                                                      |
| Bioaccumulative potential                          | Low potential for bioaccumulation (Log Kow < 4).                                                                 |
| <b>Proprietary Flavor Ingredient - p324</b>        |                                                                                                                  |
| BCF fish 1                                         | 1 (BCF; Other; 72 h; Cyprinus carpio; Static system; Fresh water; Read-across)                                   |
| Log Pow                                            | -0.31 (Experimental value)                                                                                       |
| Bioaccumulative potential                          | Low potential for bioaccumulation (Log Kow < 4).                                                                 |
| <b>Proprietary Flavor Ingredient - P222</b>        |                                                                                                                  |
| Bioaccumulative potential                          | No bioaccumulation data available.                                                                               |

## 12.4. Mobility in soil

|                                             |                                    |
|---------------------------------------------|------------------------------------|
| <b>Proprietary Flavor Ingredient - P226</b> |                                    |
| Surface tension                             | 0.04 N/m (20 °C)                   |
| <b>Proprietary Flavor Ingredient - p322</b> |                                    |
| Surface tension                             | 0.036 N/m (25 °C)                  |
| <b>Proprietary Flavor Ingredient - p324</b> |                                    |
| Surface tension                             | 0.022 N/m (20 °C)                  |
| Log Koc                                     | Koc,PCKOCWIN v1.66; 1; Read-across |

## 12.5. Other adverse effects

|                              |                                       |
|------------------------------|---------------------------------------|
| Effect on ozone layer        | : No additional information available |
| Effect on the global warming | : No known effects from this product. |
| Other information            | : Avoid release to the environment.   |

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

|                                            |                                                                                                                                              |
|--------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------|
| Product/Packaging disposal recommendations | : Dispose in a safe manner in accordance with local/national regulations. Dispose of contents/container to an approved waste disposal plant. |
| Additional information                     | : Handle empty containers with care because residual vapors are flammable.                                                                   |
| Ecology - waste materials                  | : Avoid release to the environment.                                                                                                          |

## SECTION 14: Transport information

In accordance with DOT  
Not regulated for transport

## Additional information

Other information : No supplementary information available.

## ADR

No additional information available

## Transport by sea

No additional information available

## Air transport

No additional information available

## SECTION 15: Regulatory information

### 15.1. US Federal regulations

#### Proprietary Flavor Ingredient - P226

Listed on the United States TSCA (Toxic Substances Control Act) inventory

#### Proprietary Flavor Ingredient - p322

Listed on the United States TSCA (Toxic Substances Control Act) inventory

#### Proprietary Flavor Ingredient - P124

Listed on the United States TSCA (Toxic Substances Control Act) inventory

#### Proprietary Flavor Ingredient - P280

Listed on the United States TSCA (Toxic Substances Control Act) inventory

#### Proprietary Flavor Ingredient - p324

Listed on the United States TSCA (Toxic Substances Control Act) inventory

#### Proprietary Flavor Ingredient - P222

Listed on the United States TSCA (Toxic Substances Control Act) inventory

### 15.2. International regulations

#### CANADA

No additional information available

#### EU-Regulations

No additional information available

#### Classification according to Regulation (EC) No. 1272/2008 [CLP]

#### Classification according to Directive 67/548/EEC [DSD] or 1999/45/EC [DPD]

Not classified

#### 15.2.2. National regulations

### 15.3. US State regulations

#### Proprietary Flavor Ingredient - P226

U.S. - New Jersey - Right to Know Hazardous Substance List

#### Proprietary Flavor Ingredient - p322

U.S. - New Jersey - Right to Know Hazardous Substance List

## Proprietary Flavor Ingredient - p324

U.S. - New Jersey - Right to Know Hazardous Substance List

## SECTION 16: Other information

### Other information

: **DISCLAIMER OF LIABILITY** The information in this SDS was obtained from sources which we believe are reliable. However, the information is provided without any warranty, express or implied, regarding its correctness. The conditions or methods of handling, storage, use or disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product. This SDS was prepared and is to be used only for this product. If the product is used as a component in another product, this SDS information may not be applicable

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### Full text of H-phrases:

|      |                                                                   |
|------|-------------------------------------------------------------------|
| H225 | Highly flammable liquid and vapor                                 |
| H227 | Combustible liquid                                                |
| H302 | Harmful if swallowed                                              |
| H317 | May cause an allergic skin reaction                               |
| H318 | Causes serious eye damage                                         |
| H373 | May cause damage to organs through prolonged or repeated exposure |
| H402 | Harmful to aquatic life                                           |