

## 3700 - Green Apple, Natural Flavors

### Safety Data Sheet

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

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

##### 1.1. Product identifier

Product name : 3700 - Green Apple, Natural Flavors  
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

Full text of H statements : see section 16

##### 2.2. Label elements

###### GHS US labeling

Signal word (GHS US) : Warning  
Hazard statements (GHS US) : H227 - Combustible liquid  
Precautionary statements (GHS US) : P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
P280 - Wear protective gloves/protective clothing/eye protection/face protection.  
P370+P378 - In case of fire: Use media other than water to extinguish.  
P403+P235 - Store in a well-ventilated place. Keep cool.  
P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

##### 2.3. Other hazards

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

## SECTION 3: Composition/Information on ingredients

### 3.1. Substances

Not applicable

### 3.2. Mixtures

\*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 affected person 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.
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	: Not expected to present a significant hazard under anticipated conditions of normal use.
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### 4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

## 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.
Reactivity	: The product is non-reactive under normal conditions of use, storage and transport.

### 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.
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#### 6.1.1. For non-emergency personnel

Emergency procedures	: Evacuate unnecessary personnel.
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#### 6.1.2. For emergency responders

Protective equipment	: Equip cleanup crew with proper protection.
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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.

Other information : Dispose of materials or solid residues at an authorized site.

## 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.

Hygiene measures : Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

## 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

3700 - Green Apple, Natural Flavors	
ACGIH	Not applicable
OSHA	Not applicable

## 8.2. Exposure controls

Appropriate engineering controls : Ensure good ventilation of the work station.  
Personal protective equipment : Avoid all unnecessary exposure.

Hand protection : Wear protective gloves.

Eye protection : Chemical goggles or safety glasses.

Skin and body protection : Wear suitable protective clothing.

Respiratory protection : Wear appropriate mask.

Environmental exposure controls : Avoid release to the environment.

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
	: No data available
	: No data available
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	: 163.7 °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	: 1.0465
Solubility	: Soluble in water.
Partition coefficient n-octanol/water (Log Pow)	: No data available
Partition coefficient n-octanol/water (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

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

### 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 - RW-1715	
LD50 oral rat	15645 mg/kg body weight (Equivalent or similar to OECD 401, Rat, Male / female, Experimental value, Converted value, Oral, 14 day(s))
LD50 dermal rat	> 4200 mg/kg body weight (24 h, Rat, Male / female, Experimental value, Dermal, 9 day(s))
LD50 dermal rabbit	20000 mg/kg (Rabbit)
ATE US (oral)	15645 mg/kg body weight
ATE US (dermal)	20000 mg/kg body weight

Skin corrosion/irritation : Not classified

Serious eye damage/irritation : Not classified

Respiratory or skin sensitization : Not classified

Germ cell mutagenicity : Not classified

Carcinogenicity : Not classified

Reproductive toxicity : Not classified

STOT-single exposure : Not classified

STOT-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.

## SECTION 12: Ecological information

### 12.1. Toxicity

Ecology - general : The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment.

Proprietary Flavor Ingredient - RW-1715	
LC50 - Fish [1]	5000 mg/l (LC50)
EC50 - Crustacea [1]	7417 mg/l (Equivalent or similar to OECD 202, 48 h, Daphnia magna, Static system, Fresh water, Experimental value, Locomotor effect)
ErC50 algae	> 10000 mg/l (OECD 201: Alga, Growth Inhibition Test, 72 h, Desmodesmus subspicatus, Static system, Fresh water, Experimental value, GLP)

### 12.2. Persistence and degradability

3700 - Green Apple, Natural Flavors	
Persistence and degradability	Not established.
Proprietary Flavor Ingredient - RW-1715	
Persistence and degradability	Readily biodegradable in water.

### 12.3. Bioaccumulative potential

3700 - Green Apple, Natural Flavors	
Bioaccumulative potential	Not established.

## Proprietary Flavor Ingredient - RW-1715

Partition coefficient n-octanol/water (Log Pow)	-0.71 (QSAR, KOWWIN, 21 °C)
Bioaccumulative potential	Not bioaccumulative.

## 12.4. Mobility in soil

### Proprietary Flavor Ingredient - RW-1715

Surface tension	74.161 mN/m (21 °C, 0.1 g/l, OECD 115: Surface Tension of Aqueous Solutions)
Ecology - soil	Adsorbs into the soil.

## 12.5. Other adverse effects

Effect on ozone layer : No additional information available

Other information : Avoid release to the environment.

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.

Product/Packaging disposal recommendations : Dispose in a safe manner in accordance with local/national regulations. Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

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

### Transport by sea

### Air transport

## SECTION 15: Regulatory information

### 15.1. US Federal regulations

No additional information available

### 15.2. International regulations

#### CANADA

## EU-Regulations

No additional information available

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

Not classified

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

### 15.2.2. National regulations

#### 3700 - Green Apple, Natural Flavors

Not listed on the United States TSCA (Toxic Substances Control Act) inventory

Listed on the United States TSCA (Toxic Substances Control Act) inventory - Status: Active

Listed on INSQ (Mexican National Inventory of Chemical Substances)

### 15.3. US State regulations

## SECTION 16: Other information

Other information : None.

Full text of H-phrases:

H227

Combustible liquid