Office (800)862-8620 Fax (517)882-0507

3740 - Fresh Strawberry, 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 : 3740 – Fresh Strawberry, 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.

 ${\tt P280-Wear\ protective\ gloves/protective\ clothing/eye\ protection/face\ protection.}$

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)

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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.

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 : 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.

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.

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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.

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

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**

: Handle empty containers with care because residual vapors are flammable. Keep away Additional hazards when processed

from heat source and sparks. No smoking near container.

: Wash hands and other exposed areas with mild soap and water before eating, drinking or Precautions for safe handling

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**

3740 – Fresh Strawberry, 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.

: Chemical goggles or safety glasses. Eye protection 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.

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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 : 147.6 °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 : 1.044

Solubility : Soluble in water.

Partition coefficient n-octanol/water (Log

Pow)

Partition coefficient n-octanol/water (Log

Kow)

: No data available

: 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. Sparks.

10.5. Incompatible materials

Strong acids. Strong bases.

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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

Proprietary Flavor Ingredient - RW-4	
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

Skin corrosion/irritation: Not classifiedSerious eye damage/irritation: Not classifiedRespiratory or skin sensitization: Not classifiedGerm cell mutagenicity: Not classifiedCarcinogenicity: Not classified

Proprietary	Flavor	Ingredient - RW-4	
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IARC group 1 - Carcinogenic to humans

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)

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Proprietary Flavor Ingredient - RW-4	
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

3740 – Fresh Strawberry, Natural Flavors		
Persistence and degradability	Not established.	
Proprietary Flavor Ingredient - RW-1715		
Persistence and degradability	Readily biodegradable in water.	
Proprietary Flavor Ingredient - RW-4		
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 ₂ /g substance	
Chemical oxygen demand (COD)	1.7 g O ₂ /g substance	
ThOD	2.1 g O ₂ /g substance	
BOD (% of ThOD)	0.43	

12.3. Bioaccumulative potential

3740 – Fresh Strawberry, 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.
Proprietary Flavor Ingredient - RW-4	
BCF - Fish [1]	1 (BCF; Other; 72 h; Cyprinus carpio; Static system; Fresh water; Read-across)
Partition coefficient n-octanol/water (Log Pow)	-0.31 (Experimental value)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).

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.
Proprietary Flavor Ingredient - RW-4	
Surface tension	0.022 N/m (20 °C)
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	Koc,PCKOCWIN v1.66; 1; Read-across

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.

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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

3740 - Fresh Strawberry, 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)

Listed on IARC (International Agency for Research on Cancer)

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

LORANN OILS, INC.

4518 Aurelius Road Lansing, MI 48910 Office (800)862-8620 Fax (517)882-0507

U.S. - Massachusetts - Right To Know List

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

U.S. - Pennsylvania - RTK (Right to Know) List

SECTION 16: Other information

Other information : None.

Full text of H-phrases:

H227 Combustible liquid