0495 - Colorless Tutti Frutti Flavor, Natural/Artificial

Safety Data Sheet

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

Date of issue: 09/28/2015 Version: 1

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

1.1. Product identifier

Product name : 0495 – Colorless Tutti Frutti 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

Classification (GHS-US)

Flam. Liq. 4 H227 Aquatic Acute 3 H402

Full text of H-phrases: see section 16

2.2. Label elements

GHS-US labeling

Signal word (GHS-US) : Warning

Hazard statements (GHS-US) : Combustible liquid
Harmful to aquatic life

Precautionary statements (GHS-US) : Keep away from heat source and sparks . No smoking near container.

Avoid release to the environment

Wear eye protection and protective gloves. 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. Substance

Not applicable

3.2. Mixture

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Name	%	Classification (GHS-US)
Proprietary Flavor Ingredient - P106	1.59 - 1.92	Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Inhalation:dust,mist), H332 Aquatic Acute 2, H401
Proprietary Flavor Ingredient - P226	0.95 - 1.14	Flam. Liq. 4, H227 Acute Tox. 4 (Oral), H302 Aquatic Acute 2, H401

^{*}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.

First-aid measures after eye contact : Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness

persist.

First-aid measures after ingestion : If swallowed, rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.

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

Symptoms/injuries : 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

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. Avoid release to the environment.

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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.

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.

: Strong bases. Strong acids.

Incompatible products
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

Proprietary Flavor Ingredient - P226	
OSHA	Not applicable
ACGIH	Not applicable
0495 – Colorless Tutti Frutti Flavor, Natural/Artificial	

Proprietary Flavor Ingredient - P226	
ACGIH	Not applicable
OSHA	Not applicable

Proprietary Flavor Ingredient - P106	
ACGIH	Not applicable
OSHA	Not applicable

Proprietary Flavor Ingredient - 785	
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

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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 : No data available

Flash point : 144 °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 : 1.037

Solubility : Miscible with water.

Water: N/A

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
Explosive 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)	1300.000 mg/kg body weight
ATE US (dermal)	5000.000 mg/kg body weight
Proprietary Flavor Ingredient - P106	
LD50 oral rat	1620 mg/kg body weight (Rat; Experimental value)
LD50 dermal rabbit	> 2000 mg/kg (Rabbit; Experimental value)
ATE US (oral)	1620.000 mg/kg body weight
ATE US (dust, mist)	1.500 mg/l/4h
Proprietary Flavor Ingredient - P261	
LD50 oral rat	3000 mg/kg (Rat)
LD50 dermal rabbit	> 2000 mg/kg (Rabbit)
LC50 inhalation rat (mg/l)	> 1.72 mg/l/4h (Rat)
ATE US (oral)	3000.000 mg/kg body weight
Proprietary Flavor Ingredient - P181	Coording Ng Douy Height
LD50 oral rat	5470 mg/kg (Rat)
ATE US (oral)	5470.000 mg/kg body weight
` '	547 0.000 Hig/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)	20000.000 mg/kg body weight
ATE US (dermal)	20800.000 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)	10740.000 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
Specific target organ toxicity (single exposure)	: Not classified
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Specific target organ toxicity (repeated exposure)	: Not classified
Aspiration hazard	: Not classified
Potential Adverse human health effects and	: Based on available data, the classification criteria are not met.
symptoms	. Dased on available data, the classification criteria are not filet.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - water : Harmful to aquatic life.

Proprietary Flavor Ingredient - P226		
LC50 fish 1	1.1 mg/l (96 h; Lepomis macrochirus)	
EC50 Daphnia 1	50 mg/l (24 h; Daphnia magna)	
EC50 other aquatic organisms 1	534 mg/l (5 h; Bacteria; Activated sludge)	
LC50 fish 2	11.2 mg/l 96 h; Salmo gairdneri (Oncorhynchus mykiss)	
Threshold limit other aquatic organisms 1	132 mg/l (Pseudomonas putida)	
Threshold limit algae 1	100 mg/l (336 h; Chlorella sp.; Inhibitory)	
Threshold limit algae 2	34 mg/l (Scenedesmus quadricauda)	
Proprietary Flavor Ingredient - P106		
LC50 fish 1	460 mg/l (96 h; Pimephales promelas; Nominal concentration)	
EC50 Daphnia 1	400 mg/l (48 h; Daphnia magna; GLP)	
LC50 fish 2	10 mg/l (96 h; Lepomis macrochirus)	
EC50 Daphnia 2	230 mg/l (48 h; Daphnia magna)	
Threshold limit other aquatic organisms 1	< 658 mg/l (16 h; Pseudomonas putida)	
Threshold limit algae 1	640 ppm (96 h; Scenedesmus quadricauda)	
Threshold limit algae 2	2600 mg/l (72 h; Algae)	
Proprietary Flavor Ingredient - P261		
LC50 fish 1	170 mg/l (48 h; Leuciscus idus)	
EC50 Daphnia 1	380 mg/l (48 h; Daphnia magna)	
LC50 fish 2	174 mg/l (48 h; Cyprinus carpio)	

Proprietary Flavor Ingredient - p322	
LC50 fish 1	51400 mg/l (96 h; Pimephales promelas)
LC50 other aquatic organisms 1	> 1000 mg/l (96 h)
EC50 Daphnia 1	34400 mg/l (48 h; Daphnia magna)
LC50 fish 2	51600 mg/l (96 h; Oncorhynchus mykiss)
TLM fish 1	> 1000 ppm (96 h; Pisces)
TLM other aquatic organisms 1	> 1000 ppm (96 h)
Threshold limit other aquatic organisms 1	> 1000 mg/l (96 h)
Threshold limit algae 1	15000 mg/l (336 h; Selenastrum capricornutum)
Threshold limit algae 2	< 5300 mg/l (336 h; Skeletonema costatum)

Proprietary Flavor Ingredient - p324	
LC50 fish 1	14200 mg/l (96 h; Pimephales promelas)
EC50 Daphnia 1	9300 mg/l (48 h; Daphnia magna)
LC50 fish 2	13000 mg/l 96 h; Salmo gairdneri (Oncorhynchus mykiss)
EC50 Daphnia 2	10800 mg/l (24 h; Daphnia magna)
Threshold limit other aquatic organisms 1	65 mg/l (72 h; Protozoa)
Threshold limit algae 1	1450 mg/l (192 h; Microcystis aeruginosa; Growth rate)
Threshold limit algae 2	5000 mg/l (168 h; Scenedesmus quadricauda; Growth rate)

12.2. Persistence and degradability

0495 – Colorless Tutti Frutti 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 O₂/g substance	
Chemical oxygen demand (COD)	1.98 g O₂/g substance	

Proprietary Flavor Ingredient - P226		
ThOD	2.42 g O₂/g substance	
BOD (% of ThOD)	0.67 % ThOD	
Proprietary Flavor Ingredient - P106		
Persistence and degradability	Readily biodegradable in water. Biodegradable in the soil. No (test)data on mobility of the substance available.	
Biochemical oxygen demand (BOD)	1.6 g O₂/g substance	
Chemical oxygen demand (COD)	2.4 g O₂/g substance	
ThOD	2.5 g O₂/g substance	
Proprietary Flavor Ingredient - P261		
Persistence and degradability	Readily biodegradable in water.	
Proprietary Flavor Ingredient - P181		
Persistence and degradability	Biodegradability in water: no data available.	
Proprietary Flavor Ingredient - p322		
Persistence and degradability	Readily biodegradable in water. Biodegradable in the soil.	
Biochemical oxygen demand (BOD)	0.96 - 1.08 g O₂/g substance	
Chemical oxygen demand (COD)	1.63 g O₂/g substance	
ThOD	1.69 g O₂/g substance	
BOD (% of ThOD)	0.57 % ThOD	
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 O₂/g substance	
Chemical oxygen demand (COD)	1.70 g O₂/g substance	
ThOD	2.10 g O₂/g substance	
BOD (% of ThOD)	0.43 % ThOD	

12.3. Bioaccumulative potential

0495 – Colorless Tutti Frutti Flavor, Natural/Artificial	
Bioaccumulative potential	Not established.
Proprietary Flavor Ingredient - P226	
BCF other aquatic organisms 1	4.2 - 7.8 (Estimated value)
Log Pow	1.48 (Experimental value)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).
Proprietary Flavor Ingredient - P106	
Log Pow	1.05 (Experimental value; Other; 20 °C)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).
Proprietary Flavor Ingredient - P261	
BCF fish 1	1.3 (109 h; Estimated value)
Log Pow	0.1 - 0.36
Bioaccumulative potential	Bioaccumable.
Proprietary Flavor Ingredient - P181	
Bioaccumulative potential	No bioaccumulation data available.
Proprietary Flavor Ingredient - p322	
Log Pow	-1.410.30
Bioaccumulative potential	Not bioaccumulative.
Proprietary Flavor Ingredient - p324	
BCF fish 1	1 (72 h; Cyprinus carpio)
Log Pow	-0.31 (Experimental value)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).

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12.4. Mobility in soil

Proprietary Flavor Ingredient - P226		
Surface tension	0.040 N/m (20 °C)	
Proprietary Flavor Ingredient - P106		
Surface tension	0.04 N/m (20 °C)	

Proprietary Flavor Ingredient - p322		
Surface tension	0.036 N/m (25 °C)	
Proprietary Flavor Ingredient - p324		

12.5. Other adverse effects

Effect on ozone layer :

Effect on the global warming : No known ecological damage caused by this product.

Other information : Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste 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 - P106

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

Proprietary Flavor Ingredient - P261

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

Proprietary Flavor Ingredient - P181

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

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Proprietary Flavor Ingredient - 785

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 - p324

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

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Full text of H-phrases:

At of 11 philases.			
Acute Tox. 4 (Inhalation:dust,mist)	Acute toxicity (inhalation:dust,mist) Category 4		
Acute Tox. 4 (Oral)	Acute toxicity (oral) Category 4		
Aquatic Acute 2	Hazardous to the aquatic environment - Acute Hazard Category 2		
Aquatic Acute 3	Hazardous to the aquatic environment - Acute Hazard Category 3		
Asp. Tox. 1	Aspiration hazard Category 1		
Eye Irrit. 2A	Serious eye damage/eye irritation Category 2A		
Flam. Liq. 4	Flammable liquids Category 4		
Muta. 2	Germ cell mutagenicity Category 2		
H227	Combustible liquid		
H302	Harmful if swallowed		
H304	May be fatal if swallowed and enters airways		
H319	Causes serious eye irritation		
H332	Harmful if inhaled		
H341	Suspected of causing genetic defects		
H401	Toxic to aquatic life		
H402	Harmful to aquatic life		