4518 Aurelius Road Lansing, MI 48910

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

0255 - Colorless Banana Cream Flavor, Natural/Artificial

Safety Data Sheet

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

Date of issue: 03/21/2019 Version: 2

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

1.1. **Product identifier**

Product name : 0255 - Colorless Banana Cream Flavor, Natural/Artificial

Product form

Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture : Food industry: component

Details of the supplier of the safety data sheet

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

Fax: 1.517.882.0507

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

Classification of the substance or mixture

GHS-US classification

Flam. Liq. 3 H226

Label elements

GHS-US labeling

Hazard pictograms (GHS-US)



Signal word (GHS-US) : Warning

Hazard statements (GHS-US) : Flammable liquid and vapor

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

Keep container tightly closed

Ground/Bond container and receiving equipment Use explosion-proof manufacturing equipment

Use only non-sparking tools

Take precautionary measures against static discharge

Wear eve protection and protective gloves.

If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with

water/shower

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

Unknown acute toxicity (GHS US)

Not applicable

SECTION 3: Composition/Information on ingredients

Substances 3.1.

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

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/Take off immediately all contaminated clothing. Rinse skin with water/shower.

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.

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

Symptoms/effects : Not expected to present a significant hazard under anticipated conditions of normal use.

Indication of any immediate medical attention and special treatment needed

No additional information available

SECTION 5: Firefighting measures

5.1. **Extinguishing media**

: Foam, Dry powder, Carbon dioxide, Water spray, Sand, Suitable extinguishing media

Unsuitable extinguishing media : Do not use a heavy water stream.

Special hazards arising from the substance or mixture

Fire hazard : Flammable liquid and vapor.

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

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

Personal precautions, protective equipment and emergency procedures

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

smokina

For non-emergency personnel 6.1.1.

Emergency procedures : Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment : Equip cleanup crew with proper protection.

: Ventilate area. **Emergency procedures**

Environmental precautions

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

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

Precautions for safe handling

- : Handle empty containers with care because residual vapors are flammable.
- : 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. Take precautionary measures against static discharge. Use only non-sparking tools.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Proper grounding procedures to avoid static electricity should be followed. Ground/bond

container and receiving equipment. Use explosion-proof manufacturing equipment.

Storage conditions : Keep only in the original container in a cool, well ventilated place away from : Keep container

tightly closed.

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

0255 – Colorless Banana Cream Flavor, Natural/Artificial	
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 : > 100 °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 : 1.022

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
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

Flammable liquid and vapor. 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 - P239	
LD50 oral rat	> 2000 mg/kg (Rat; OECD 401: Acute Oral Toxicity; Experimental value; >5000 mg/kg bodyweight; Rat)
LD50 dermal rabbit	3216 mg/kg (Rabbit; Experimental value; 3216 mg/kg bodyweight; Rabbit)
ATE US (dermal)	3216 mg/kg body weight
Proprietary Flavor Ingredient - P276	
LD50 oral rat	13400 mg/kg (Rat)
LD50 dermal rabbit	> 5000 mg/kg (Rabbit)
ATE US (oral)	13400 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)

Proprietary Flavor Ingredient - p322	
ATE US (oral)	20000 mg/kg body weight
ATE US (dermal)	20800 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
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.

SECTION 12: Ecological information

12.1. Toxicity

Proprietary Flavor Ingredient - P239	
LC50 fish 1	700 mg/l (LC50; OECD 203: Fish, Acute Toxicity Test; 96 h; Salmo gairdneri; Static system; Fresh water; Experimental value)
EC50 Daphnia 1	255 mg/l (EC50; DIN 38412-11; 48 h; Daphnia magna; Static system; Fresh water; Experimental value)
Threshold limit algae 2	> 500 mg/l (EC50; DIN 38412-9; 72 h; Scenedesmus subspicatus; Static system; Fresh water; Experimental value)
Proprietary Flavor Ingredient - P276	
LC50 fish 1	100 mg/l (LC50; 96 h)
LC50 other aquatic organisms 1	50 (10 - 100) mg/l (96 h)
EC50 Daphnia 2	175 (146 - 192) mg/l (Daphnia magna)
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)

12.2. Persistence and degradability

0255 - Colorless Banana Cream Flavor, Natural/Artificial		
Persistence and degradability	Not established.	
Proprietary Flavor Ingredient - P220		
Persistence and degradability	Biodegradability in soil: no data available.	
ThOD	2.037 g O ₂ /g substance	
Proprietary Flavor Ingredient - P239		
Persistence and degradability	Readily biodegradable in water. Highly mobile in soil.	
Biochemical oxygen demand (BOD)	1.6 g O ₂ /g substance	
Chemical oxygen demand (COD)	2.44 g O ₂ /g substance	
ThOD	2.74 g O ₂ /g substance	
BOD (% of ThOD)	0.59	

Proprietary Flavor Ingredient - P276		
Persistence and degradability	Readily biodegradable in water. Biodegradable in the soil. Photolysis in the air.	
ThOD	2.2 g O ₂ /g substance	
BOD (% of ThOD)	0.6	
Proprietary Flavor Ingredient - P315		
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 O ₂ /g substance	
Chemical oxygen demand (COD)	1.63 g O ₂ /g substance	
ThOD	1.69 g O ₂ /g substance	
BOD (% of ThOD)	0.57	

12.3. Bioaccumulative potential

0255 – Colorless Banana Cream Flavor, Natural/Artificial		
Bioaccumulative potential	Not established.	
Proprietary Flavor Ingredient - P220		
Bioaccumulative potential	No bioaccumulation data available.	
Proprietary Flavor Ingredient - P239		
Log Pow	1.35 (Experimental value; OECD 107: Partition Coefficient (n-octanol/water): Shake Flask Method)	
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).	
Proprietary Flavor Ingredient - P276		
BCF fish 1	6.5 (4 - 9.7) mg/l (Pisces; Estimated value)	
Log Pow	1.59 - 1.78	
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).	
Proprietary Flavor Ingredient - P315		
Bioaccumulative potential	No bioaccumulation data available.	
Proprietary Flavor Ingredient - p322		
Log Pow	-1.410.30 (-0.92; Experimental value; -1.07; Experimental value; Equivalent or similar to OECD 107; 20.5 °C)	
Bioaccumulative potential	Not bioaccumulative.	

12.4. Mobility in soil

Proprietary Flavor Ingredient - P239	
Surface tension	0.024 N/m (20 °C)
Log Koc	log Koc,SRC PCKOCWIN v2.0; 0.73; QSAR
Proprietary Flavor Ingredient - P276	
Surface tension	0.024 N/m (20 °C)
Proprietary Flavor Ingredient - p322	
Surface tension	0.036 N/m (25 °C)

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

Transport document description : UN1197 Extracts, flavoring, liquid, 3, III

UN-No.(DOT) : UN1197

Proper Shipping Name (DOT) : Extracts, flavoring, liquid

Class (DOT) : 3 - Class 3 - Flammable and combustible liquid 49 CFR 173.120

Hazard labels (DOT) : 3 - Flammable liquid



Packing group (DOT) : III - Minor Danger

DOT Special Provisions (49 CFR 172.102) : B1 - If the material has a flash point at or above 38 C (100 F) and below 93 C (200 F), then the bulk packaging requirements of 173.241 of this subchapter are applicable. If the material

has a flash point of less than 38 C (100 F), then the bulk packaging requirements of 173.242 of

this subchapter are applicable.

IB3 - Authorized IBCs: Metal (31A, 31B and 31N); Rigid plastics (31H1 and 31H2); Composite (31HZ1 and 31HA2, 31HB2, 31HD2 and 31HH2). Additional Requirement: Only liquids with a vapor pressure less than or equal to 110 kPa at 50 C (1.1 bar at 122 F), or 130 kPa at 55 C (1.3 bar at 131 F) are authorized, except for UN2672 (also see Special Provision IP8 in

Table 2 for UN2672).

T2 - 1.5 178.274(d)(2) Normal...... 178.275(d)(3)

TP1 - The maximum degree of filling must not exceed the degree of filling determined by the following: Degree of filling = 97 / 1 + a (tr - tf) Where: tr is the maximum mean bulk

temperature during transport, and tf is the temperature in degrees celsius of the liquid during

DOT Packaging Exceptions (49 CFR 173.xxx) : 150
DOT Packaging Non Bulk (49 CFR 173.xxx) : 203
DOT Packaging Bulk (49 CFR 173.xxx) : 242

DOT Quantity Limitations Passenger aircraft/rail : 60 L

(49 CFR 173.27)

DOT Quantity Limitations Cargo aircraft only (49 : 220 L

CFR 175.75)

DOT Vessel Stowage Location : A - The material may be stowed "on deck" or "under deck" on a cargo vessel and on a

passenger vessel.

Additional information

Emergency Response Guide (ERG) Number : 127

Other information : No supplementary information available.

ADR

No additional information available

Transport by sea

UN-No. (IMDG) : 1197

Proper Shipping Name (IMDG) : EXTRACTS, FLAVORING, LIQUID

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

Class (IMDG) : 3 - Flammable liquids

Packing group (IMDG) : III - substances presenting low danger

Air transport

UN-No. (IATA) : 1197

Proper Shipping Name (IATA) : Extracts, flavouring, liquid Class (IATA) : 3 - Flammable Liquids Packing group (IATA) : III - Minor Danger

SECTION 15: Regulatory information

15.1. US Federal regulations

Proprietary Flavor Ingredient - P220

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

Proprietary Flavor Ingredient - P239

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

Proprietary Flavor Ingredient - P276

Listed on the United States TSCA (Toxic Substances Control Act) inventory Not subject to reporing requirements of the United States SARA Section 313

CERCLA RQ 5000 lb

Proprietary Flavor Ingredient - P315

Listed on the United States TSCA (Toxic Substances Control Act) inventory Not subject to reporing requirements of the United States SARA Section 313

CERCLA RQ 5000 lb

Proprietary Flavor Ingredient - p322

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 - P220

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

Proprietary Flavor Ingredient - P239

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

Proprietary Flavor Ingredient - P276

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

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

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Proprietary Flavor Ingredient - P315

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

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

Proprietary Flavor Ingredient - p322

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:

H226 Flammable liquid and vapor