



## 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

### 1.1. Product identifier

**Number** 712CON

**Manufacturer** Apex Flavors, Inc.  
1371 Brass Mill Rd  
Suite A  
Belcamp, MD 21017  
410-565-6600

**Product name** ORANGE CREAM TYPE, NATURAL FLAVOR BLEND (OIL SOLUBLE)  
**Pure substance/mixture** Mixture

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

**Recommended Use** Not for direct consumption

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

For further information, please contact:

**E-mail Address** cpisano@apexflavors.com

### 1.4. Emergency telephone number

**Emergency telephone** Chemtrec: 1-800-424-9300 for US/ 703-527-3887 outside US

## 2. HAZARDS IDENTIFICATION

### 2.1. Classification of the substance or mixture

Aspiration toxicity	Category 1
Acute oral toxicity	Category 5
Acute dermal toxicity	Category 5
Skin corrosion/irritation	Category 2
Skin sensitization	Category 1
Acute aquatic toxicity	Category 1
Chronic aquatic toxicity	Category 1
Flammable liquids	Category 3

**Classification according to EU Directives 67/548/EEC or 1999/45/EC**  
For the full text of the R-phrases mentioned in this Section, see Section 16

#### Symbol(s)

Xi - Irritant  
N - Dangerous for the environment

#### R-code(s)

R10 - Xi; R38 - R43 - N; R50/53

### 2.2. Label elements



**Signal Word**

Danger

**Hazard Statements**

H315 - Causes skin irritation  
 H317 - May cause an allergic skin reaction  
 H410 - Very toxic to aquatic life with long lasting effects  
 H304 - May be fatal if swallowed and enters airways

H226 - Flammable liquid and vapor

**Precautionary Statements**

P280 - Wear eye protection/ face protection  
 P321 - Specific treatment (see .? on this label)  
 P301 + P310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor/ physician  
 P331 - Do NOT induce vomiting  
 P370 + P378 - In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction  
 P210 - Keep away from heat/sparks/open flames/hot surfaces. - No smoking

**2.3. Other information**

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

**3.1 Substances**

Chemical Name	EC-No	CAS-No	Alternate CAS #	Weight %	Classification according to Directive 67/548/EEC or 1999/45/EC	Classification according to Regulation (EC) No. 1272/2008 [CLP]	REACH Registration Number
LIMONENE	227-813-5	5989-27-5		50-90%	R10, XI; R38, XI; R43, N; R50/53;	Aquatic Acute 1 (H400) Skin Sens. 1 (H317) Skin Irrit. 1 (H315) Asp. Tox. 1 (H304) Aquatic Chronic 1 (H410) Flam. Liq. 3 (H226)	No data available
PINENES	201-291-9	80-56-8		<1	R10, XI; R43, N; R50/53, XN; R65;	Aquatic Acute 1 (H400) Skin Sens. 1 (H317) Skin Irrit. 1 (H315) Asp. Tox. 1 (H304) Aquatic Chronic 1 (H410) Acute Tox. 5 (H303) Flam. Liq. 3 (H226)	No data available

For the full text of the R-phrases mentioned in this Section, see Section 16

## 4. FIRST AID MEASURES

### 4.1. Description of first aid measures

<b>General advice</b>	Immediate medical attention is required Show this material safety data sheet to the doctor in attendance. If symptoms persist, call a physician
<b>Eye contact</b>	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes If symptoms persist, call a physician Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes Keep eye wide open while rinsing
<b>Skin contact</b>	Wash off immediately with plenty of water. Wash contaminated clothing before reuse. If skin irritation persists, call a physician. Wash off immediately with soap and plenty of water. Immediate medical attention is not required. Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes.
<b>Ingestion</b>	Do NOT induce vomiting. Drink plenty of water. Immediate medical attention is not required. Rinse mouth. Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person. Call a physician.
<b>Inhalation</b>	Move to fresh air. If symptoms persist, call a physician. Immediate medical attention is not required. Move to fresh air in case of accidental inhalation of vapors. Move to fresh air in case of accidental inhalation of vapors or decomposition products.
<b>Self-protection of the first aider</b>	Remove all sources of ignition Use personal protective equipment

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

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

**Note to physicians** May cause sensitization in susceptible persons Treat symptomatically

## 5. FIRE-FIGHTING MEASURES

### 5.1. Extinguishing media

**Suitable Extinguishing Media**

Use Dry chemical Carbon dioxide CO<sub>2</sub> Water spray Alcohol-resistant foam

**Extinguishing media which shall not be used for safety reasons**

No information available

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

**Special Hazard**

None

### 5.3. Advice for firefighters

**Special protective equipment for fire-fighters**

As in any fire, wear self-contained breathing apparatus and full protective gear

## 6. ACCIDENTAL RELEASE MEASURES

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

Remove all sources of ignition. Evacuate personnel to safe areas. Ensure adequate ventilation. Use personal protective equipment. Keep people away from and upwind of spill/leak. Pay attention to flashback. Take precautionary measures against static

discharges.

See Section 12 for additional Ecological Information

**6.2. Environmental precautions**

Prevent further leakage or spillage if safe to do so. Prevent product from entering drains. Do not flush into surface water or sanitary sewer system. Beware of vapors accumulating to form explosive concentrations. Vapors can accumulate in low areas.

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

Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust)

**7. HANDLING AND STORAGE**

**7.1. Precautions for safe handling**

Ensure adequate ventilation. Keep away from open flames, hot surfaces and sources of ignition. Take precautionary measures against static discharges. Use only in an area containing flame proof equipment. To avoid ignition of vapors by static electricity discharge, all metal parts of the equipment must be grounded. Use only in area provided with appropriate exhaust ventilation. Use personal protective equipment as required. Do not breathe dust/fume/gas/mist/vapors/spray. Keep away from heat, sparks and open flame. No smoking. Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapors).

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

Keep tightly closed in a dry and cool place. Keep in properly labeled containers. Keep containers tightly closed in a cool, well-ventilated place. Keep away from heat.

**7.3 Specific end use(s)**

Exposure scenario N/A

Other Guidelines N/A

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

**8.1. Control parameters**

**Exposure limits** This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies

Chemical Name	European Union	The United Kingdom	France	Spain	Germany
LIMONENE 5989-27-5					MAK: 20 ppm MAK: 110 mg/m <sup>3</sup> Ceiling / Peak: 40 ppm Ceiling / Peak: 220 mg/m <sup>3</sup> TWA: 20 ppm TWA: 110 mg/m <sup>3</sup>
PINENES 80-56-8				VLA-ED: 20 ppm VLA-ED: 113 mg/m <sup>3</sup>	

Chemical Name	Italy	Portugal	The Netherlands	Finland	Denmark
LIMONENE 5989-27-5				TWA: 25 ppm TWA: 140 mg/m <sup>3</sup> STEL: 50 ppm STEL: 280 mg/m <sup>3</sup>	
PINENES 80-56-8		TWA: 20 ppm			

Chemical Name	Austria	Sweden - Occupational	Switzerland	Poland	Norway

		Exposure Limits - TLVs (LLVs)		
LIMONENE 5989-27-5			STEL: 40 ppm STEL: 220 mg/m <sup>3</sup> MAK: 20 ppm MAK: 110 mg/m <sup>3</sup>	TWA: 25 ppm TWA: 140 mg/m <sup>3</sup> STEL: 37.5 ppm STEL: 175 mg/m <sup>3</sup>
PINENES 80-56-8		25 ppm NGV 150 mg/m <sup>3</sup> NGV		TWA: 25 ppm TWA: 140 mg/m <sup>3</sup> Skin STEL: 37.5 ppm STEL: 175 mg/m <sup>3</sup>

**Derived No Effect Level (DNEL)** No information available

**Predicted No Effect Concentration (PNEC)** No information available

**8.2. Exposure controls**

**Engineering Controls** Ensure adequate ventilation, especially in confined areas

**Personal protective equipment**

**Eye Protection** Tightly fitting safety goggles

**Hand Protection** Protective gloves

**Skin and body protection** Antistatic boots Wear fire/ flame resistant/ retardant clothing Impervious gloves Long sleeved clothing Apron Chemical resistant apron

**Respiratory protection** When workers are facing concentrations above the exposure limit they must use appropriate certified respirators

**General Hygiene Considerations** When using, do not eat, drink or smoke Provide regular cleaning of equipment, work area and clothing

**Environmental Exposure Controls** Do not allow material to contaminate ground water system

## 9. PHYSICAL AND CHEMICAL PROPERTIES

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

<b>Physical state</b>	liquid	<b>Appearance</b>	clear
<b>Odor</b>	creamy orange	<b>Color</b>	amber
<b>Property</b>	<b>Values</b>	<b>Method</b>	
pH		No information available	
Melting/freezing point		No information available	
Boiling point/boiling range		FCC Method	
Flash Point	52 °C / 125 °F	Closed cup	
Evaporation rate		FCC Method	
Flammability (solid, gas)		No information available	
Flammability Limits in Air		No information available	
Upper flammability limit			
lower flammability limit			
Vapor pressure mm Hg 20°C		No information available	
Vapor density		No information available	
Relative density		No information available	
Specific Gravity @ 25C	0.922 - 0.942	FCC Method	
Specific Gravity @ 20C	0.925 - 0.945	FCC Method	
Refractive Index		FCC Method	
Water solubility		No information available	
Partition coefficient: n-octanol/water		No information available	
Autoignition temperature		No information available	
Decomposition temperature		No information available	
Viscosity, dynamic		No information available	
<b>Explosive properties</b>	No information available		
<b>Oxidizing Properties</b>	No information available		

### 9.2. Other information

VOC Content(%)	73.108
Molecular Weight	No information available

## 10. STABILITY AND REACTIVITY

### 10.1. Reactivity

#### 10.2. Chemical stability

Stable under normal conditions

#### 10.3. Possibility of hazardous reactions

#### 10.4. Conditions to avoid

Heat, flames and sparks

#### 10.5. Incompatible materials

No materials to be especially mentioned

#### 10.6. Hazardous decomposition products

None under normal use conditions



**12.3. Bioaccumulative potential**

No information available

Chemical Name	log Pow
PINENES	4.1

**12.4. Mobility in soil**

No information available

**12.5. Results of PBT and vPvB assessment**

**12.6. Other adverse effects**

Endocrine Disruptor Information .? is a suspected endocrine disruptor

**13. DISPOSAL CONSIDERATIONS**

**13.1. Waste treatment methods**

<b>Waste from residues / unused products</b>	Dispose of in accordance with local regulations
<b>Contaminated packaging</b>	Empty containers should be taken to an approved waste handling site for recycling or disposal
<b>Other Information</b>	According to the European Waste Catalogue, Waste Codes are not product specific, but application specific Waste codes should be assigned by the user based on the application for which the product was used

**14. TRANSPORT INFORMATION**

<b>DOT/ADR</b>	Not regulated (If shipped in NON BULK packaging by ground transport)
UN/ID No	1197
Proper shipping name	EXTRACTS, FLAVOURING, LIQUID
Hazard class	3
Packing Group	III
ERG Code	127

<b>IMDG / IMO</b>	
Proper shipping name	EXTRACTS, FLAVOURING, LIQUID
Hazard class	3
UN/ID No	1197
Packing Group	III
Marine pollutant	This product contains a chemical which is listed as a marine pollutant according to IMDG/IMO

<b>ICAO/IATA</b>	
UN/ID No	1197
Proper shipping name	EXTRACTS, FLAVOURING, LIQUID
Hazard class	3
Packing Group	III
Marine Pollutant	P

**15. REGULATORY INFORMATION**

**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**



**WGK Classification**

**International Inventories**

All of the components in the product are on the following Inventory lists: United States of America (TSCA), Canada (DSL/NDSL), Europe (EINECS/ELINCS/NLP), Australia (AICS), Korea (ECL), China (IECSC), Japan (ENCS), Philippines (PICCS).

TSCA	Complies
EINECS/ELINCS	Complies
DSL/NDSL	Complies
PICCS	Complies
ENCS	Complies
IECSC	Complies
AICS	Complies
KECL	Complies

**Legend**

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory  
EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances  
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List  
PICCS - Philippines Inventory of Chemicals and Chemical Substances  
ENCS - Japan Existing and New Chemical Substances  
IECSC - China Inventory of Existing Chemical Substances  
AICS - Australian Inventory of Chemical Substances  
KECL - Korean Existing and Evaluated Chemical Substances

**15.2. Chemical safety assessment**

**16. OTHER INFORMATION**

**Risk Combination Phrases**

R50/53 - Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment

**Full text of H-Statements referred to under sections 2 and 3**

H400 - Very toxic to aquatic life H317 - May cause an allergic skin reaction H315 - Causes skin irritation H304 - May be fatal if swallowed and enters airways H410 - Very toxic to aquatic life with long lasting effects H226 - Flammable liquid and vapor H303 - May be harmful if swallowed

Revision Date 15-Feb-2019

Revision Note Not applicable.

Revision# 2.01

This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006.

**WARNING/DISCLAIMER:**

Apex Flavors, Inc.'s products are sold exclusively for use in food and drink for human consumption. These products have not been tested, nor have they been deemed safe, for inhalation or use in electronic smoking devices, electronic nicotine delivery systems, and electronic cigarettes or similar devices (collectively "E-Cigarettes"). In supplying this product(s), Apex Flavors, Inc. instructs, and purchasing recipient confirms, that this product(s) will not be used in connection with the manufacture and distribution of E-Cigarettes or any component thereof. Recipients of our products that use them outside of their intended use of food or drink do so at their own risk and without warranty, either expressed or implied, from Apex Flavors, Inc. or its suppliers. The user assumes all liability for loss, injury, damage, or expense resulting from such uses.

**Disclaimer**

Food ingredients that are safe to be consumed in food products may pose hazards if not handled properly. This product is intended to be used in food products and, not intended to be consumed in its present form. The information provided on this SDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material

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designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.