Safety Data Sheet

For Compliance with OSHA 29 CFR 1910.1200 and ANSI Z400.1-1998

Section 1: Identification

Product Name Flavor, Tangerine Powder
Commercial Name N/A
Product Use Ingredient for use in products that may be ingested.Used in the manufacture of products for consumer
Restrictions On Use Not for personal use in this form or concentration

Product Code 50-4676

Company
PCCA
9901 South Wilcrest
Houston, TX 77099
Phone: 1-800-331-2498
Fax: 1-800-874-5760

In case of emergency contact:
CHEMTREC (24hr) 1-800-424-9300

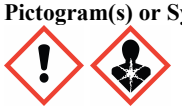
Section 2: Hazard(s) Identification

OSHA Haz Com: CFR 1910.1200 Skin Sensitization - Cat. 1 Environmental Hazard (chronic) - Cat. 2

Signal Word WARNING

Hazard Statement(s) May cause an allergic skin reaction. Suspected of damaging fertility or the unborn child.

Pictogram(s) or Symbol(s)



Precautionary Statement(s):

Prevention Avoid breathing dust/fume/gas/mist/vapours/spray. Avoid release to the environment. Contaminated work clothing should not be allowed out of the workplace. Wear protective gloves/protective clothing/eye protection/face protection.

Response If on skin: Wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice/attention.

Storage Not available.

Disposal Not available.

Section 3: Composition/Information on Ingredients

Substance/Mixture Mixture
Components limonene, Benzene, 1-methyl-4-(1-methylethyl)-
% By Weight limonene:7.5-10.0%, Benzene, 1-methyl-4-(1-methylethyl)-0.1-0.5%
CAS# N/A
Molecular Weight Not available.
Chemical Formula N/A
Synonym(s) N/A

Mixtures

Name	CAS#	% by Weight	TLV/PEL	LC50/LD50
limonene	0000138-86-3	7.5 - 10.0%	N/A	N/A
Benzene, 1-methyl-4-(1-methylethyl)-	0000099-87-6	0.1 - 0.5%	N/A	N/A

Section 4: First-Aid Measures

Inhalation In the event of exposure to vapors, immediately remove from the area to a fresh environment.

Skin Contact Remove contaminated clothes. Wash skin with large volumes of water. If irritation persists, or any sign of tissue damage is apparent

Eye Contact In the event of contact with the eyes, irrigate with water for at least 15 minutes.obtain medical advice if irritation persists.

Ingestion In the event of accidental ingestion, rinse mouth with water. Give up to one tumbler (half pint) of milk or water. Obtain medical advise immediately. Do not induce vomiting, obtain medical advise immediately.

Symptoms/Effects

Acute No information available on the product itself.

Delayed No information available on the product itself.

Immediate Medical Attention

As in all cases of potential poisoning, Obtain medical advice immediately.

Section 5: Fire-Fighting Measures

Suitable Extinguishing Media

In the event of fire, adequate extinguishers should be used. Avoid inhalation of smoke and fumes. In case of insufficient ventilation, wear suitable respiratory equipment. Use standard procedures and preferred extinguishing media as stated below. Extinguishing media: Water, foam, carbon dioxide or dry chemical.

Unsuitable Extinguishing Media

Not available.

Products of Combustion

Product is a combustible powder. Like all combustible powders, it may form explosive mixtures if suspended in air.

Firefighters Special Equipment and Precautions

Not available.

Section 6: Accidental Release Measures

Personal precautions, protective equipment and emergency procedures:For non-emergency personnel:Adequate protective gloves should be worn when handling spillages. No smoking. Avoid naked flames or other potential sources of ignition (eg. electrical equipment). Avoid skin contamination and inhalation of dust. Individual washing routines should be followed after any potential contact. Ensure adequate ventilation in working areas following accidental releases Environmental precautions: Do not discharge directly into drains, air, into soil or into the aquatic environment Methods and material for containment and cleaning up:For containment:Small Spills can be swept up and disposed of properly. Do not allow powder to accumulate on horizontal surfaces, as an explosive dust/air mixture could occur if suddenly dispersed into the air. For cleaning-up:Spillages should be disposed of in accordance with Governmental Regulations.

Section 7: Handling and Storage

Precautions for safe handling:Keep strict control of dust accumulation to a minimum.Avoid contact with skin and eyes.Wear adequate protective gloves protection and eye/face protection.No smoking. Avoid any source of ignition. Use flameproof electrical equipment and spark-reduced tools. Ensure that all equipments are properly bonding and earthing.Avoid exposing to high temperature during processing.Do not ingest or apply to the skin as such. Good personal washing routines should be followed.Maintain adequate local and general ventilation where product is handled. Protective measures:Keep strict control of dust accumulation to a minimum.Maintain adequate local and general ventilation where product is handled.Avoid any sources of ignition. Advice on general occupational hygiene:Good personal washing routines should be followed Conditions for safe storage, including any incompatibilities:It is good general practice to store in closed, preferably full, containers away from heat sources, and protected from extremes of temperature. Do not re-use the empty container. Respect generals rules for compatibility storage

Section 8: Exposure Controls/Personal Protection

Exposure Limits Avoid exposing to high temperature during processing. Maintain adequate local and general ventilation where product is handled. 0000138-86-3 : d-Limonene (All forms) AIHA Workplace Environmental Exposure Levels (1999-JAN) TWA (1999-JAN) : 30 ppm , 8 hours (All forms)

Engineering Controls Maintain adequate local and general ventilation where product is handled and dispensed.

Personal Protection Respiratory protection: Breathing of the vapors or dust particles may be hazardous. In the absence of appropriate engineering controls such as spot ventilation, ventilated enclosures, etc., workers should avail themselves of the appropriate NIOSH approved respiratory protection. OSHA has established limits for Respirable dust (PEL of 5 mg/m3) TWA and Total dust (PEL of 15 mg/m3)TWA. It is recommended that when using powders that air monitoring of the workplace be condu cted to ensure that these levels are not exceeded. Hand protection: Adequate Protective Gloves should be worn. Eye protection: Adequate safety glasses should be used. Skin protection: Wear protective clothing, overall if necessary to limit the odor contamination of personal clothing. Individual washing routines should be followed after any potential contact.

Section 9: Physical and Chemical Properties

Appearance Yellow Granular powder
Odor Charactistic strong odor
Odor Threshold Not available.

Melting Point Not available.
Freezing Point Not available.
Boiling Point/Range Not available.
Decomposition temperature Not available.

pH Not available.
Vapor Pressure < 0.1 mm
Vapor Density Not available.
Viscosity Not available.

Partition Coefficient: n-octanol/water Not available.

Evaporation Rate Not available.

Flash Point >212F(>100C)
Flammability Not available.

Autoignition temperature Not available.

Flammability or Explosive Limits:

Lower Not available.

Upper Not available.

Solubility(ies) Not available.
Other VOC Content less than:10%

Section 10: Stability and Reactivity

Reactivity Not available.
Chemical Stability Presents no significant reactivity hazard. Normally stable even at elevated temperatures and pressures. Avoid temperatures above or near to the flash point. Not pyrophoric nor reactive with water. Does not undergo no explosive decomposition, is shock stable, and is not an oxygen donor. Does not form explosive mixtures with other organic materials. Will not undergo hazardous exothermic polymerization.
Hazardous Polymerization Will not undergo hazardous exothermic polymerization.
Conditions to Avoid Avoid temperatures above or at least 5 °C below flash point for any flammable liquids. Do not heat closed containers. Avoid contact with oxidizing agents.
Incompatible Materials Avoid strong oxidizing agents.
Hazardous Decomposition Products Not available.

Section 11: Toxicological Information

RTECS N/A

Acute Toxicity
Not available

Skin Corrosion/Irritation
Not available

Serious Eye Damage/Irritation
N/A

Respiratory or Skin Sensitization
N/A

Germ Cell Mutagenicity
N/A

Carcinogenicity
N/A

Reproductive Toxicity
N/A

Routes of Entry
Not available.

Symptoms Related to Exposure
N/A

Potential Health Effects
Not available

Target Organ(s) N/A

Section 12: Ecological Information

Ecotoxicity
This mixture has not been subjected to ecotoxicological testing as an entity. According to available data on the constituents the environmental classification criteria are met.

Persistance and Degradability
N/A

Bioaccumulative Potential
N/A

Mobility in Soil
N/A

Other Adverse Effects
N/A

Section 13: Disposal Considerations

Waste Disposal
Minimize release to the environment.

Disposal of Container
N/A

Other Considerations
N/A

Section 14: Transport Information

DOT Classification
UN-No:3077 Proper Shipping Name:ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (LIMONENE) Class:9 Packing Group:III Hazardous to the Environment Land transport (ADR/RID) UN-No:3077 Proper Shipping Name:ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (LIMONENE) Class:9 Packing group:III Sea transport (IMDG-Code) UN-No:3077 Proper Shipping Name:ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (LIMONENE) Class:9 Packing group:III Marine pollutant Air transport (ICAO-IATA) UN-No:3077 Proper Shipping Name:ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (LIMONENE) Class:9 Packing group:III

Section 15: Regulatory Information

Regulations
NFPA Hazard Classification Health:2 Flammability:1 Reactivity:0 This mixture contains no toxic chemical or chemicals subject to reporting requirements of Section 313 of Title III of the Superfund Amendements and Reauthorization Act of 1986 and 29 CFR Part 1910.1200

Other
Not available.

Section 16: Other Information

We believe that the information contained herein is current as of the date of this Safety Data Sheet. Since the use of this information and the conditions of use of the product are not within the control of Firmenich, it is the user's obligation to determine conditions of safe use of the product. Information contained in this document and related material is proprietary to Firmenich. Disclosure to third parties without the prior written consent of Firmenich except where required by applicable laws and regulations and/or reverse engineering are strictly prohibited.