



This safety data sheet complies with the requirements of:
 OSHA CFR Title 29 CFR 1910.1200

Version 1

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product identifier

Product Code(s) 037, 037TTB
Product name PAWPAW TYPE FLAVOR, NATURAL & ARTIFICIAL

UN/ID No 1197

Recommended use of the chemical and restrictions on use

Recommended Use No information available.
Uses advised against No information available

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

Emergency telephone

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

2. HAZARDS IDENTIFICATION

Classification

| | |
|---|-------------|
| Acute toxicity - Inhalation (Dusts/Mists) | Category 4 |
| Carcinogenicity | Category 1A |
| Flammable liquids | Category 3 |

GHS Label elements, including precautionary statements

Emergency Overview

Danger

Hazard Statements
 Harmful if inhaled
 May cause cancer
 Flammable liquid and vapor

Appearance liquid **Physical state** liquid **Aroma** No information available

Precautionary Statements - Response
 IF exposed or concerned: Get medical advice/attention

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
In case of fire: Use CO₂, dry chemical, or foam for extinction

Precautionary Statements - Storage

Store locked up
Store in a well-ventilated place. Keep cool

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

Other information

- Harmful to aquatic life with long lasting effects
- Harmful to aquatic life

3. COMPOSITION/INFORMATION ON INGREDIENTS

| Chemical Name | CAS-No | Weight % | Trade Secret |
|----------------|----------|----------|--------------|
| ETHYL ALCOHOL | 64-17-5 | 1-5% | * |
| VANILLIN | 121-33-5 | 1-5% | * |
| BENZYL ALCOHOL | 100-51-6 | <1 | * |

4. FIRST AID MEASURES

First aid measures for different exposure routes

| | |
|---|---|
| General advice | If symptoms persist, call a physician. |
| Eye contact | 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. If symptoms persist, call a physician. |
| Skin contact | Immediate medical attention is not required. Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. If skin irritation persists, call a physician. |
| Inhalation | Immediate medical attention is not required. If symptoms persist, call a physician. Move to fresh air in case of accidental inhalation of vapors or decomposition products. |
| Ingestion | Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person. Call a physician. Do NOT induce vomiting. |
| Self-protection of the first aider | Use personal protective equipment. |

Most important symptoms/effects, acute and delayed

Main Symptoms Hives.

Indication of immediate medical attention and special treatment needed, if necessary

Note to physicians Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Use. Dry chemical. Carbon dioxide CO₂. Water spray. Alcohol-resistant foam.

Unsuitable extinguishing media

Decomposition by contact with water may generate vapors which can be ignited by heat or open flame.

Specific hazards arising from the chemical

Keep product and empty container away from heat and sources of ignition. Risk of ignition.

Explosion data

Sensitivity to Mechanical Impact none.

Sensitivity to Static Discharge Yes.

Protective Equipment and Precautions for Firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions

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

Environmental precautions

Environmental precautions

Prevent further leakage or spillage if safe to do so. Prevent product from entering drains. Beware of vapors accumulating to form explosive concentrations. Vapors can accumulate in low areas.

Methods and materials for containment and cleaning up

Methods for containment

Prevent further leakage or spillage if safe to do so.

Methods for cleaning up

Dam up. Soak up with inert absorbent material. Pick up and transfer to properly labeled containers. Take precautionary measures against static discharges.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling

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

Conditions for safe storage, including any incompatibilities

Storage Conditions

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

Incompatible products

None known based on information supplied.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines

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

| Chemical Name | ACGIH TLV | OSHA PEL | NIOSH IDLH |
|---------------|----------------|-------------------------|----------------|
| ETHYL ALCOHOL | STEL: 1000 ppm | TWA: 1000 ppm TWA: 1900 | IDLH: 3300 ppm |

| | | | |
|--|-------------------------------|---|---|
| 64-17-5 | | mg/m ³ (vacated) TWA: 1000 ppm (vacated) TWA: 1900 mg/m ³ | TWA: 1000 ppm TWA: 1900 mg/m ³ |
| ISOAMYL ACETATE 123-92-2 | STEL: 100 ppm TWA: 50 ppm | TWA: 100 ppm TWA: 525 mg/m ³ (vacated) TWA: 100 ppm (vacated) TWA: 525 mg/m ³ | IDLH: 1000 ppm TWA: 100 ppm TWA: 525 mg/m ³ |
| ETHYL ACETATE 141-78-6 | TWA: 400 ppm | TWA: 400 ppm TWA: 1400 mg/m ³ (vacated) TWA: 400 ppm (vacated) TWA: 1400 mg/m ³ | IDLH: 2000 ppm TWA: 400 ppm TWA: 1400 mg/m ³ |
| ISOBUTYL ACETATE 110-19-0 | TWA: 150 ppm | TWA: 150 ppm TWA: 700 mg/m ³ (vacated) TWA: 150 ppm (vacated) TWA: 700 mg/m ³ | IDLH: 1300 ppm TWA: 150 ppm TWA: 700 mg/m ³ |
| ACETIC ACID 64-19-7 | STEL: 15 ppm TWA: 10 ppm | TWA: 10 ppm TWA: 25 mg/m ³ (vacated) TWA: 10 ppm (vacated) TWA: 25 mg/m ³ | IDLH: 50 ppm TWA: 10 ppm TWA: 25 mg/m ³ STEL: 15 ppm STEL: 37 mg/m ³ |
| ISOAMYL ALCOHOL 123-51-3 | STEL: 125 ppm TWA: 100 ppm | TWA: 100 ppm TWA: 360 mg/m ³ (vacated) TWA: 100 ppm (vacated) TWA: 360 mg/m ³ (vacated) STEL: 125 ppm (vacated) STEL: 450 mg/m ³ | IDLH: 500 ppm TWA: 100 ppm TWA: 360 mg/m ³ STEL: 125 ppm STEL: 450 mg/m ³ |
| Trade Secret | TWA: 50 ppm | TWA: 100 ppm TWA: 465 mg/m ³ (vacated) TWA: 100 ppm (vacated) TWA: 465 mg/m ³ | IDLH: 800 ppm TWA: 100 ppm TWA: 465 mg/m ³ |
| ACETYL PROPIONYL FCC (2,3 PENTANEDIONE) 600-14-6 | STEL: 31 ppb | - | IDLH: TWA: 9.3 ppb |
| PINENES 80-56-8 | TWA: 20 ppm | - | |
| BENZYL ACETATE 140-11-4 | TWA: 10 ppm | - | |
| DIMETHYL SULFIDE 75-18-3 | TWA: 10 ppm | - | |

NIOSH IDLH: *Immediately Dangerous to Life or Health*

Other Exposure Guidelines

Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992).

Exposure controls

Engineering Controls

Showers
Eyewash stations
Ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/face protection

Tightly fitting safety goggles.

Skin and body protection

Chemical resistant apron.

Respiratory protection

If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection must be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

General Hygiene Considerations

When using, do not eat, drink or smoke. Provide regular cleaning of equipment, work area and clothing.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical and chemical properties

| | |
|-----------------------|--------------------------|
| Physical state | liquid |
| Appearance | liquid |
| Aroma | No information available |
| Color | No information available |

| <u>Property</u> | <u>Values</u> | <u>Method</u> |
|--|--------------------------|--------------------------|
| pH | | No information available |
| Melting/freezing point | | FCC Method |
| Boiling point/boiling range | | FCC Method |
| Flash Point | 58 °C / 136 °F | Closed cup |
| Evaporation rate | No information available | No information available |
| Flammability (solid, gas) | No information available | No information available |
| Flammability Limits in Air | | No information available |
| Upper flammability limit | No information available | |
| lower flammability limit | No information available | |
| Vapor pressure mm Hg 20°C | | No information available |
| Vapor density | | No information available |
| Specific Gravity @ 25C | 1.0034 - 1.0534 | FCC Method |
| Specific Gravity @ 20C | 1.0064 - 1.0564 | FCC Method |
| Refractive Index @ 20C | 1.3948 - 1.4138 | FCC Method |
| Water solubility | Practically insoluble | |
| Solubility in other solvents | | No information available |
| Partition coefficient: n-octanol/water | | No information available |
| Autoignition temperature | No information available | No information available |
| Decomposition temperature | | No information available |
| Viscosity, kinematic | No information available | No information available |
| Viscosity, dynamic | No information available | |
| Explosive properties | No information available | |
| Oxidizing Properties | No information available | |

Other information

| | |
|---------------------------|--------------------------|
| Softening point | No information available |
| Molecular Weight | No information available |
| VOC Content(%) | No information available |
| Density VALUE | No information available |
| Bulk Density VALUE | No information available |

10. STABILITY AND REACTIVITY

Reactivity

No data available

Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions

None under normal processing.

Conditions to Avoid

Heat, flames and sparks.

Incompatible Materials

None known based on information supplied.

Hazardous Decomposition Products

None known based on information supplied.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

| | |
|----------------------------|--|
| Product Information | Product does not present an acute toxicity hazard based on known information |
| Inhalation | There is no data available for this product. |
| Eye contact | There is no data available for this product. |
| Skin contact | There is no data available for this product. |
| Ingestion | There is no data available for this product. |

| Chemical Name | Oral LD50 | Dermal LD50 | LC50 Inhalation |
|-----------------------------|---------------------|------------------------|------------------------|
| PROPYLENE GLYCOL 57-55-6 | 20000 mg/kg (Rat) | 20800 mg/kg (Rabbit) | - |
| ETHYL ALCOHOL 64-17-5 | 7060 mg/kg (Rat) | - | 124.7 mg/L (Rat) 4 h |

Information on toxicological effects

Symptoms No information available.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Sensitization No information available.
Germ Cell Mutagenicity No information available.
Carcinogenicity This product contains one or more substances which are classified by IARC as carcinogenic to humans (Group I), probably carcinogenic to humans (Group 2A) or possibly carcinogenic to humans (Group 2B).

| Chemical Name | ACGIH | IARC | NTP | OSHA |
|--------------------------|-------|---------|-------|------|
| ETHYL ALCOHOL 64-17-5 | A3 | Group 1 | Known | X |

ACGIH (American Conference of Governmental Industrial Hygienists)
 A3 - *Animal Carcinogen*
 IARC (International Agency for Research on Cancer)
 Group 1 - *Carcinogenic to Humans*
 NTP (National Toxicology Program)
 Known - *Known Carcinogen*
 OSHA (Occupational Safety and Health Administration of the US Department of Labor)
 X - *Present*

Reproductive toxicity No information available.
Specific target organ systemic toxicity (single exposure) No information available.
Specific target organ systemic toxicity (repeated exposure) No information available.
Chronic toxicity May cause adverse liver effects. Contains a known or suspected reproductive toxin.
Target Organ Effects Blood, Central nervous system, Eyes, Liver, Reproductive system, Respiratory system, Skin.
Aspiration hazard No information available.

Numerical measures of toxicity - Product Information

The following values are calculated based on chapter 3.1 of the GHS document
 . mg/kg mg/l

12. ECOLOGICAL INFORMATION

Ecotoxicity

Harmful to aquatic life with long lasting effects

36.548% of the mixture consists of components(s) of unknown hazards to the aquatic environment

Persistence and degradability

No information available.

Bioaccumulation

No information available.

| Chemical Name | log Pow |
|----------------------------|---------|
| ETHYL ALCOHOL 64-17-5 | -0.32 |
| VANILLIN 121-33-5 | 1.23 |
| BENZYL ALCOHOL 100-51-6 | 1.1 |

Other adverse effects

No information available

13. DISPOSAL CONSIDERATIONS

Waste treatment

Waste Disposal Methods It must undergo special treatment, e.g. at suitable disposal site, to comply with local regulations.

Contaminated packaging Do not reuse container.

US EPA Waste Number D001 U112

This product contains one or more substances that are listed with the State of California as a hazardous waste.

| Chemical Name | California Hazardous Waste Status |
|--------------------------|-----------------------------------|
| ETHYL ALCOHOL 64-17-5 | Toxic Ignitable |

14. TRANSPORT INFORMATION

DOT/ADR 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

ICAO/IATA

UN/ID No 1197

Proper shipping name EXTRACTS, FLAVOURING, LIQUID

Hazard class 3

Packing Group III

ERG Code 127

IMDG / IMO

UN/ID No 1197
 Proper shipping name EXTRACTS, FLAVOURING, LIQUID
 Hazard class 3
 Packing Group III

15. REGULATORY INFORMATION

International Inventories

TSCA -
 DSL/NDSL -
 EINECS/ELINCS -
 ENCS -
 IECS -
 KECL -
 PICCS -
 AICS -

Legend:

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

U.S. Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

SARA 311/312 Hazard Categories

Acute Health Hazard Yes
 Chronic Health Hazard no
 Fire Hazard Yes
 Sudden Release of Pressure Hazard no
 Reactive Hazard no

Clean Water Act

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

U.S. State Regulations

California Proposition 65

This product contains the following Proposition 65 chemicals:

| Chemical Name | California Prop. 65 |
|-------------------------|---------------------|
| ETHYL ALCOHOL - 64-17-5 | Carcinogen |

| | |
|--------------------|------------|
| MYRCENE - 123-35-3 | Carcinogen |
|--------------------|------------|

U.S. State Right-to-Know Regulations

| Chemical Name | New Jersey | Massachusetts | Pennsylvania |
|-----------------------------|------------|---------------|--------------|
| PROPYLENE GLYCOL 57-55-6 | X | | X |
| ETHYL ALCOHOL 64-17-5 | X | X | X |
| ISOAMYL ACETATE 123-92-2 | X | X | X |
| Trade Secret | X | X | X |
| BUTYRIC ACID 107-92-6 | X | X | X |
| DIMETHYL SULFIDE 75-18-3 | X | X | X |
| METHYL EUGENOL 93-15-2 | X | | |

U.S. EPA Label information

16. OTHER INFORMATION

| | | | | |
|-------------|-----------------|----------------|-------------------|---------------------------------|
| NFPA | Health Hazard 2 | Flammability 2 | Instability 0 | Physical and chemical hazards * |
| HMIS | Health Hazard 2 | Flammability 2 | Physical Hazard 0 | Personal protection B |

Revision Date 01-Jun-2021
 Revision Note No information available
 Revision# 1

WARNING/DISCLAIMER:

The ingredients/flavors provided by Trilogy have not been tested, nor have they been deemed safe, for inhalation or use in electronic smoking devices, electronic nicotine delivery systems, electronic cigarettes or other similar devices (collectively "E-Cigarettes"). In supplying ingredients/flavors, Trilogy instructs, and by receiving such ingredients/flavors recipient confirms, that the ingredients/flavors will not be used in connection with the manufacture and distribution of E-Cigarettes or any component thereof.

Disclaimer

The information provided in this Safety Data Sheet 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 guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

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