



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

1.1. Product identifier

Number 550TTB

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

Product name HONEYSUCKLE TYPE, NATURAL & ARTIFICIAL (Contains <0.10% Artificial Top Note)
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

| | |
|-----------------------------------|-------------|
| Serious eye damage/eye irritation | Category 2A |
| Carcinogenicity | Category 1A |
| Acute aquatic toxicity | Category 2 |
| Chronic aquatic toxicity | Category 3 |
| Flammable liquids | Category 2 |

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

R-code(s)
R52/53

2.2. Label elements



Signal Word

Danger

Hazard Statements

H319 - Causes serious eye irritation
H350 - May cause cancer
H401 - Toxic to aquatic life
H412 - Harmful to aquatic life with long lasting effects

Precautionary Statements

P201 - Obtain special instructions before use
P281 - Use personal protective equipment as required
P308 + P313 - IF exposed or concerned: Get medical advice/ attention
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 |
|---------------|-----------|-----------|-----------------|----------|--|--|---------------------------|
| ETHYL ALCOHOL | 200-578-6 | 64-17-5 | | 90-100% | F; R11 | Flam. Liq. 2 (H225) Eye Irrit. 1 (H319) | No data available |
| NEROLIDOL | 205-540-2 | 142-50-7 | | <1 | N; R50/53; | Aquatic Acute 1 (H400) Skin Irrit. 3 (H316) Aquatic Chronic 1 (H410) | No data available |
| FARNESOL | 225-004-1 | 4602-84-0 | | <1 | XI; R36/38, XI; R43; | Skin Sens. 1 (H317) Eye Irrit. 1 (H319) Skin Irrit. 2 (H316) | 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

Eye contact Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

| | |
|---------------------|---|
| Skin contact | Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. |
| Ingestion | Clean mouth with water and drink afterwards plenty of water. |
| Inhalation | Move to fresh air. |

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 Treat symptomatically

5. FIRE-FIGHTING MEASURES

5.1. Extinguishing media

Suitable Extinguishing Media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment

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

Ensure adequate ventilation.

See Section 12 for additional Ecological Information

6.2. Environmental precautions

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.

7.2. Conditions for safe storage, including any incompatibilities

Keep container tightly closed in a dry and well-ventilated place.

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 |
|--------------------------|----------------|--|--|--|---|
| ETHYL ALCOHOL 64-17-5 | | STEL: 3000 ppm STEL: 5760 mg/m ³ TWA: 1000 ppm TWA: 1920 mg/m ³ | VME: 1000 ppm VME: 1900 mg/m ³ VLCT: 5000 ppm VLCT: 9500 mg/m ³ | VLA-ED: 1000 ppm VLA-ED: 1910 mg/m ³ | MAK: 500 ppm MAK: 960 mg/m ³ Ceiling / Peak: 1000 ppm Ceiling / Peak: 1920 mg/m ³ Skin TWA: 500 ppm TWA: 960 mg/m ³ |

| Chemical Name | Italy | Portugal | The Netherlands | Finland | Denmark |
|--------------------------|-------|---------------|--|--|--|
| ETHYL ALCOHOL 64-17-5 | | TWA: 1000 ppm | Skin STEL: 1900 mg/m ³ TWA: 260 mg/m ³ | TWA: 1000 ppm TWA: 1900 mg/m ³ STEL: 1300 ppm STEL: 2500 mg/m ³ | TWA: 1000 ppm TWA: 1900 mg/m ³ |

| Chemical Name | Austria | Sweden - Occupational Exposure Limits - TLVs (LLVs) | Switzerland | Poland | Norway |
|--------------------------|--|--|--|-----------------------------|---|
| ETHYL ALCOHOL 64-17-5 | STEL 2000 ppm STEL 3800 mg/m ³ MAK: 1000 ppm MAK: 1900 mg/m ³ | 500 ppm NGV 1000 mg/m ³ NGV | STEL: 1000 ppm STEL: 1920 mg/m ³ MAK: 500 ppm MAK: 960 mg/m ³ | NDS: 1900 mg/m ³ | TWA: 500 ppm TWA: 950 mg/m ³ STEL: 625 ppm STEL: 1187.5 mg/m ³ |

| Component | Ireland |
|--------------------------------------|---|
| ETHYL ALCOHOL 64-17-5 (90-100%) | TWA: 1000 ppm TWA: 1900 mg/m ³ |

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

General Hygiene Considerations Handle in accordance with good industrial hygiene and safety practice.

Environmental Exposure Controls No information available

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

| | | | |
|--|--------------------------|--------------------------|-----------|
| Physical state | liquid | Appearance | clear |
| Odor | sweet floral | Color | colorless |
| Property | Values | Method | |
| pH | | No information available | |
| Melting/freezing point | | No information available | |
| Boiling point/boiling range | | FCC Method | |
| Flash Point | 18 °C / 64 °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 | 0.8035 - 0.8335 | FCC Method | |
| Specific Gravity @ 20C | 0.8065 - 0.8365 | FCC Method | |
| Refractive Index | 1.3521 - 1.3821 | 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 | |
| Explosive properties | No information available | | |
| Oxidizing Properties | No information available | | |

9.2. Other information

| | |
|------------------|--------------------------|
| VOC Content(%) | 95.73522 |
| 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

11. TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Acute toxicity

| | |
|-----------------------|---|
| 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 |
| Acute toxicity | 0.62399% of the mixture consists of ingredient(s) of unknown toxicity |

The following values are calculated based on chapter 3.1 of the GHS document (Rev. 1, 2005):

Oral 7,119.00 mg/kg

Inhalation
Mist 69,215.53 mg/l

| | |
|----------------------------------|--------------------------|
| Skin corrosion/irritation | No information available |
| Eye damage/irritation | No information available |
| Sensitization | No information available |
| Germ Cell Mutagenicity | No information available |
| Carcinogenicity | No information available |

Specific target organ systemic toxicity (single exposure) No information available

Specific target organ systemic toxicity (repeated exposure) No information available

Target Organ Effects Blood Central nervous system Eyes Liver Reproductive system Respiratory system Skin

Aspiration hazard No information available

12. ECOLOGICAL INFORMATION

12.1. Toxicity

Ecotoxicity effects Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

| Chemical Name | Toxicity to algae | Toxicity to fish | Toxicity to daphnia and other aquatic invertebrates |
|---------------|-------------------|--|---|
| ETHYL ALCOHOL | | 12.0 - 16.0: 96 h Oncorhynchus mykiss mL/L LC50 static 100: 96 h Pimephales promelas mg/L LC50 static 13400 - 15100: 96 h Pimephales promelas mg/L LC50 flow-through | 9268 - 14221: 48 h Daphnia magna mg/L LC50 10800: 24 h Daphnia magna mg/L EC50 2: 48 h Daphnia magna mg/L EC50 Static |

12.2. Persistence and degradability

No information available

12.3. Bioaccumulative potential

No information available

| Chemical Name | log Pow |
|---------------|---------|
| ETHYL ALCOHOL | -0.32 |

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

Waste from residues / unused products Dispose of in accordance with local regulations

Contaminated packaging Empty containers should be taken to an approved waste handling site for recycling or disposal

14. TRANSPORT INFORMATION

DOT/ADR

UN/ID No 1197
 Proper shipping name EXTRACTS, FLAVOURING, LIQUID
 Hazard class 3
 Packing Group II
 ERG Code 127

IMDG / IMO

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

ICAO/IATA

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

15. REGULATORY INFORMATION

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

WGK Classification

| | |
|---------------|---|
| Chemical Name | Germany - Water Classification (VwVwS) - Annex 2 - Water Hazard Classes |
| ETHYL ALCOHOL | Hazard Class 1 |

64-17-5

International Inventories

All of the components in the product are on the following Inventory lists: No information available.

| | |
|---------------|---|
| TSCA | - |
| EINECS/ELINCS | - |
| DSL/NDSL | - |
| PICCS | - |
| ENCS | - |
| IECSC | - |
| AICS | - |
| KECL | - |

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
R36/38 - Irritating to eyes and skin
R51/53 - Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment
R52/53 - Harmful 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 H316 - Causes mild skin irritation H410 - Very toxic to aquatic life with long lasting effects H317 - May cause an allergic skin reaction H319 - Causes serious eye irritation H225 - Highly flammable liquid and vapor

Revision Date 14-Jun-2018

Revision Note Not applicable.

Revision# 1

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 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.