



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

1.1. Product identifier

Reach Registration Number	NA
Number	390PGFT
EC-No	NA
CAS-No	NA
FEMA Numbers	NA
Manufacturer	Apex Flavors, Inc. 1371 Brass Mill Rd. Suite A Belcamp, MD 21017 (410) 565-6600
Product name	LINGONBERRY TYPE, NATURAL FLAVOR BLEND
Pure substance/mixture	Mixture

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

Recommended Use No information available

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
Acute aquatic toxicity	Not classified for acute
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

2.2. Label elements

**Signal Word**

Warning

Hazard Statements

H319 - Causes serious eye irritation

H411 - Toxic to aquatic life with long lasting effects

Precautionary Statements

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	Present	64-17-5		50-90%	F; R11	Eye Irrit. 1 (H319) (EFFA) Flam. Liq. 2 (H225) (EFFA) Flam. Liq. 2 (H225)	No data available
GLYCERINE	Present	56-81-5		30-50%	-	No data available	No data available
DAMASCENONE	Present	23696-85-7		<1	-	Aquatic Acute 2 (H401) (EFFA) Skin Sens. 1 (H317) (EFFA) Skin Irrit. 3 (316) (EFFA) Aquatic Chronic 2 (H411) (EFFA)	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

Prevent further leakage or spillage if safe to do so.

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	TWA: 1000 ppm TWA: 1900 mg/m ³ STEL: 5000 ppm STEL: 9500 mg/m ³	STEL: 1000 ppm STEL: 1910 mg/m ³	TWA: 500 ppm TWA: 960 mg/m ³ Ceiling / Peak: 1000 ppm Ceiling / Peak: 1920 mg/m ³ Skin
GLYCERINE 56-81-5		STEL: 30 mg/m ³ TWA: 10 mg/m ³	TWA: 10 mg/m ³	TWA: 10 mg/m ³	TWA: 50 mg/m ³ Ceiling / Peak: 100 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
GLYCERINE 56-81-5		TWA: 10 mg/m ³		TWA: 20 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 TWA: 1000 ppm TWA: 1900 mg/m ³	500 ppm NGV 1000 mg/m ³ NGV	STEL: 1000 ppm STEL: 1920 mg/m ³ TWA: 500 ppm TWA: 960 mg/m ³	TWA: 1900 mg/m ³	TWA: 500 ppm TWA: 950 mg/m ³ STEL: 625 ppm STEL: 1187.5 mg/m ³
GLYCERINE 56-81-5			STEL: 100 mg/m ³ TWA: 50 mg/m ³	TWA: 10 mg/m ³	

Component	Ireland
ETHYL ALCOHOL 64-17-5 (50-90%)	STEL: 1000 ppm
GLYCERINE 56-81-5 (30-50%)	TWA: 10 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	berry	Color	Colorless to pale yellow.
<u>Property</u>	<u>Values</u>	<u>Method</u>	
pH		No information available	
Melting/freezing point		No information available	
Boiling point/boiling range		FCC Method	
Flash Point	18 °C / 65 °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	0.904 - 0.934	FCC Method	
Specific Gravity @ 20C	0.907 - 0.937	FCC Method	
Refractive Index	1.377 - 1.407	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(%)	95.3376416062347
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 2.518467% 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):

Dermal 29,376.00 mg/kg

Mist 501.88 mg/l

Chemical Name	Oral LD50	Dermal LD50	LC50 Inhalation
ETHYL ALCOHOL			124.7 mg/L (Rat) 4 h
GLYCERINE		10 g/kg (Rabbit)	570 mg/m ³ (Rat) 1 h

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 Kidney Liver Reproductive system Respiratory system Skin

Aspiration hazard No information available

12. ECOLOGICAL INFORMATION

12.1. Toxicity

Ecotoxicity effects Contains no substances known to be hazardous to the environment or not degradable in waste water treatment plants

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 2: 48 h Daphnia magna mg/L EC50 Static
GLYCERINE		51 - 57: 96 h Oncorhynchus mykiss mL/L LC50 static	500: 24 h Daphnia magna mg/L EC50

12.2. Persistence and degradability

No information available

12.3. Bioaccumulative potential

No information available

Chemical Name	log Pow
ETHYL ALCOHOL	-0.32
GLYCERINE	-1.76

12.4. Mobility in soil

No information available

12.5. Results of PBT and vPvB assessment**12.6. Other adverse effects****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****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
ERG Code 127

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 64-17-5	Hazard Class 1
GLYCERINE 56-81-5	Hazard Class 1

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

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

H401 - Toxic to aquatic life H317 - May cause an allergic skin reaction H411 - Toxic to aquatic life with long lasting effects H319 - Causes serious eye irritation H225 - Highly flammable liquid and vapor

Revision Date 19-Oct-2015

Revision Note Not applicable.

Revision# 1.01

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.

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