APEX FLAVORS, INC.

SAFETY DATA SHEET.



Version 1

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

1.1. Product identifier

Number 349, 349BEV, 349TTB, 349ICR

Manufacturer Apex Flavors, Inc.

1361 Brass Mill Rd.

Suite E

Belcamp, MD 21017 (410) 565-6600

Product name COFFEE ESPRESSO TYPE FLAVOR, NATURAL WONF

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/ Outside US Chemtel 813-248-0585

2. HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Serious eye damage/eye irritation	Category 2A
Skin sensitization	Category 1
Carcinogenicity	Category 1A
Acute aquatic toxicity	Category 2
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

2.2. Label elements



Signal Word

Danger

Hazard Statements

H317 - May cause an allergic skin reaction

H319 - Causes serious eye irritation

H350 - May cause cancer

H401 - Toxic to aquatic life

H226 - Flammable liquid and vapor

Precautionary Statements

P280 - Wear eye protection/ face protection

P321 - Specific treatment (see .? on this label)

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 %	Classificatio n according to Directive 67/548/EEC or 1999/45/EC	Classification according to Regulation (EC) No. 1272/2008 [CLP]	REACH Registration Number
PROPYLENE GLYCOL	200-338-0	57-55-6		20-30%	-	No data available	No data available
ETHYL ALCOHOL	200-578-6	64-17-5		20-30%	F; R11	Flam. Liq. 2 (H225) Flam. Liq. 2 (H225)	No data available
Trade Secret	Listed	-		1-5%	XI; R43;	Skin Sens. 1 (H317) Acute Tox. 5 (H303)	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 p

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
PROPYLENE GLYCOL		STEL: 450 ppm STEL:			
57-55-6		1422 mg/m ³ STEL: 30			
		mg/m³			
		TWA: 150 ppm TWA:			
		474 mg/m³ TWA: 10			
		mg/m³			
ETHYL ALCOHOL		STEL: 3000 ppm	VME: 1000 ppm VME:	VLA-ED: 1000 ppm	MAK: 500 ppm MAK:
64-17-5		STEL: 5760 mg/m ³	1900 mg/m ³	VLA-ED: 1910 mg/m ³	960 mg/m ³
		TWA: 1000 ppm TWA:	VLCT: 5000 ppm		Ceiling / Peak: 1000
		1920 mg/m ³	VLCT: 9500 mg/m ³		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		TWA: 1000 ppm		TWA: 1000 ppm TWA:	'''
64-17-5			STEL: 1900 mg/m ³ TWA: 260 mg/m ³	1900 mg/m ³ STEL: 1300 ppm	1900 mg/m³
				STEL: 2500 mg/m ³	

Chemical Name	Austria	Sweden - Occupational Exposure Limits - TLVs (LLVs)	Switzerland	Poland	Norway
PROPYLENE GLYCOL 57-55-6					TWA: 25 ppm TWA: 79 mg/m³ STEL: 37.5 ppm STEL: 118.5 mg/m³
ETHYL ALCOHOL 64-17-5	STEL 2000 ppm STEL 3800 mg/m³ MAK: 1000 ppm MAK: 1900 mg/m³	500 ppm NGV 1000 mg/m³ NGV	STEL: 1000 ppm STEL: 1920 mg/m³ MAK: 500 ppm MAK: 960 mg/m³	NDS: 1900 mg/m ³	TWA: 500 ppm TWA: 950 mg/m³ STEL: 625 ppm STEL: 1187.5 mg/m³

Component	Ireland
PROPYLENE GLYCOL 57-55-6 (20-30%)	TWA: 150 ppm TWA: 470 mg/m³ TWA: 10 mg/m³
ETHYL ALCOHOL 64-17-5 (20-30%)	TWA: 1000 ppm TWA: 1900 mg/m ³

Derived No Effect Level (DNEL) No information available

Predicted No Effect Concentration No information available

(PNEC)

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 roasted coffee Color Colorless to light yellow.

Property Values Method

pH No information available
Melting/freezing point No information available

Boiling point/boiling range FCC Method Flash Point 24 °C / 76 °F Closed cup Evaporation rate FCC Method

Evaporation rateFCC MethodFlammability (solid, gas)No information availableFlammability Limits in AirNo information available

Upper flammability limit lower flammability limit

Vapor pressure mm Hg 20°CNo information availableVapor densityNo information available

Vapor density

Relative density

No information available

No information available

Specific Gravity @ 25C

No 2712 1 0012

FCC Method

 Specific Gravity @ 25C
 0.9712 - 1.0012
 FCC Method

 Specific Gravity @ 20C
 0.9742 - 1.0042
 FCC Method

 Refractive Index
 1.4046 - 1.4346
 FCC Method

Refractive Index 1.4046 - 1.4346 FCC Method
Water solubility No information available
Partition coefficient: n-octanol/water No information available

Autoignition temperatureNo information availableDecomposition temperatureNo information availableViscosity, dynamicNo information available

Explosive properties No information available Oxidizing Properties No information available

9.2. Other information

VOC Content(%) 59.6949996948242 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 5.867% 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
 5,740.00 mg/kg

 Dermal
 6,053.00 mg/kg

Chemical Name	Oral LD50	Dermal LD50	LC50 Inhalation
PROPYLENE GLYCOL	20000 mg/kg (Rat)	20800 mg/kg (Rabbit)	
ETHYL ALCOHOL	7060 mg/kg (Rat)		124.7 mg/L (Rat) 4 h
Trade Secret	1580 mg/kg (Rat)	5010 mg/kg (Rabbit)	

Skin corrosion/irritation Eye damage/irritation

Sensitization

Germ Cell Mutagenicity

Carcinogenicity

No information available No information available No information available

No information available 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 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
PROPYLENE GLYCOL	19000: 96 h Pseudokirchneriella subcapitata mg/L EC50	51600: 96 h Oncorhynchus mykiss mg/L LC50 static 41 - 47: 96 h Oncorhynchus mykiss mL/L LC50 static 51400: 96 h Pimephales promelas mg/L LC50 static 710: 96 h Pimephales promelas mg/L LC50	10000: 24 h Daphnia magna mg/L EC50 1000: 48 h Daphnia magna mg/L EC50 Static
ETHYL ALCOHOL		mykiss mL/L LC50 static 100: 96 h	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
Trade Secret		53-61.3: 96 h Pimephales promelas mg/L LC50 flow-through 57: 96 h Pimephales promelas mg/L LC50 semi-static 88: 96 h Pimephales promelas mg/L LC50 static	180: 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
Trade Secret	1.23

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 III

ICAO/IATA

UN/ID No 1197

Proper shipping name EXTRACTS, FLAVOURING, LIQUID

Hazard class 3
Packing Group III
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 - Wate		
	Hazard Classes		
PROPYLENE GLYCOL	Hazard Class 1		
57-55-6			
ETHYL ALCOHOL	Hazard Class 1		
64-17-5			

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), China (IECSC), Philippines (PICCS).

TSCA Complies
EINECS/ELINCS Complies
DSL/NDSL Complies
PICCS Complies
ENCS Complies

IECSC Complies
AICS Complies
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

H317 - May cause an allergic skin reaction H303 - May be harmful if swallowed H225 - Highly flammable liquid and vapor

Revision Date 25-Feb-2016

Revision Note Not applicable.

Revision#

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

WARNING/DISCLAIMER:

Our ingredients have not been tested, nor have they been determined safe, for inhalation or use in any electronic smoking devices, electronic nicotine delivery systems, electronic cigarettes, or other similar devices (collectively "E-Cigarettes") or in any E-Liquids used with E-Cigarettes. By receiving Apex Flavors, Inc ingredients, the recipient confirms that they will not use these ingredients in connection with the manufacture and distribution of E-Cigarettes, E-Liquids or any component thereof. WE DISCLAIM, TO THE FULLEST EXTENT PERMITTED BY LAW, ALL WARRANTIES, EXPRESS OR IMPLIED, and disclaim all liability in connection with the use of our ingredients in connection with E-Cigarettes and E-Liquids. All such risks are assumed by you and the user.

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