APEX FLAVORS, INC.

SAFETY DATA SHEET.



Version 1

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

1.1. Product identifier

Number 1537, 1537BEV, 1537TTB

Manufacturer Apex Flavors, Inc. 1361 Brass Mill Rd.

1301 Diass Will

Suite E

Belcamp, MD 21017 (410) 565-6600

Product name UBE 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/ Outside US Chemtel 813-248-0585.

2. HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Flammable liquids Category 4

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

H227 - Combustible liquid

Precautionary Statements

P403 + P235 - Store in a well-ventilated place. Keep cool

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

P280 - Wear protective gloves/ eye protection/ face protection

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		REACH Registration Number
PROPYLENE GLYCOL	200-338-0	57-55-6		50-90%	-	No data available	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

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.

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.

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.

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 Dry chemical Carbon dioxide CO2 Water spray Alcohol-resistant foam

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

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

See Section 12 for additional Ecological Information

6.2. Environmental precautions

Do not flush into surface water or sanitary sewer system. Prevent further leakage or spillage if safe to do so. Prevent product from entering drains.

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

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).

7.2. Conditions for safe storage, including any incompatibilities

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

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			

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

Component	Ireland	
PROPYLENE GLYCOL	TWA: 150 ppm TWA: 470 mg/m ³ TWA: 10 mg/m ³	
57-55-6 (50-90%)		

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 Chemical resistant apron Antistatic boots Impervious gloves Respiratory protection When workers are facing concentrations above the exposure limit they must use

appropriate certified respirators

General Hygiene Considerations When using, do not eat, drink or smoke Provide regular cleaning of equipment, work area

and clothing

Environmental Exposure Controls No information available

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Physical stateliquidAppearanceclearOdorNuttyColorcolorless

<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 105 °C / 221 °F Closed cup
Evaporation rate FCC Method

Flammability (solid, gas)

Flammability Limits in Air

No information available
No information available

Upper flammability limit lower flammability limit

Vapor pressure mm Hg 20°C

Vapor density

No information available
No information available

Relative density

Specific Gravity @ 25C

Specific Gravity @ 20C

0.9891 - 1.1098

FCC Method

FCC Method

FCC Method

Specific Gravity @ 20C 0.9921 - 1.1128 FCC Method
Refractive Index 1.3000 - 1.5000 FCC Method
Water solubility No information available

Partition coefficient: n-octanol/water

Autoignition temperature

Decomposition temperature

Viscosity, dynamic

No information available
No information available
No information available
No information available

Explosive properties No information available Oxidizing Properties No information available

9.2. Other information

VOC Content(%) 60

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 39.69% 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
 20,103.00 mg/kg

 Dermal
 20,907.00 mg/kg

Chemical Name	Oral LD50	Dermal LD50	LC50 Inhalation
PROPYLENE GLYCOL	20000 mg/kg (Rat)	20800 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

Specific target organ systemic toxicity (single exposure)

No information available

Specific target organ systemic toxicity (repeated exposure)

No information available

Target Organ Effects No information available

Aspiration hazard No information available

12. ECOLOGICAL INFORMATION

12.1. Toxicity

Ecotoxicity effectsContains 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

12.2. Persistence and degradability

No information available

12.3. Bioaccumulative potential

No information available

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

DOTNot regulatedIMDG / IMONot regulatedICAO/IATANot regulated

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	
PROPYLENE GLYCOL	Hazard Class 1	
57-55-6		

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 -

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

Revision Date 09-Nov-2015

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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