



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

**1.1. Product identifier**

**Number** 068

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

**Product name** BRANDY TYPE EXTRACT, 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**

Acute dermal toxicity	Category 1
Acute inhalation toxicity - dust/mist	Category 4
Serious eye damage/eye irritation	Category 2A
Acute aquatic toxicity	Not classified for acute
Chronic aquatic toxicity	Not classified chronic
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

**Symbol(s)**  
T+ - Very toxic

**R-code(s)**  
T+;R27

**2.2. Label elements****Signal Word**

Danger

**Hazard Statements**

H310 - Fatal in contact with skin

H319 - Causes serious eye irritation

H332 - Harmful if inhaled

H411 - Toxic to aquatic life with long lasting effects

H226 - Flammable liquid and vapor

**Precautionary Statements**

P280 - Wear eye protection/ face protection

P361 - Remove/Take off immediately all contaminated clothing

P322 - Specific measures (see .? on this label)

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
PROPYLENE GLYCOL	200-338-0	57-55-6		30-50%	-	No data available	No data available
ETHYL ALCOHOL	Present	64-17-5		30-50%	F; R11	Eye Irrit. 1 (H319) (EFLA) Flam. Liq. 2 (H225) (EFLA) Flam. Liq. 2 (H225)	No data available
Trade Secret	Listed	-		1-5%	-	Flam. Liq. 3 (H226)(EFLA) Acute Tox. 4 (H332)(EFLA)	No data available
Trade Secret	Listed	-		<1	Xn; R21 T; R23/25 Xi; R36/37/38 Carc.Cat.3; R40	Carc. 2 (H351) Eye Irrit. 1 (H319) Skin Irrit. 2 (H316) Acute Tox. 3 (H301) Acute Tox. 4 (H312) Flam. Liq. 4 (H227) Acute Tox. 2 (H330)	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

<b>General advice</b>	Immediate medical attention is required
<b>Eye contact</b>	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 Call a physician immediately
<b>Skin contact</b>	Immediate medical attention is required. Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes.
<b>Ingestion</b>	Do NOT induce vomiting. Call a physician or Poison Control Center immediately. Never give anything by mouth to an unconscious person. Drink plenty of water.
<b>Inhalation</b>	Immediate medical attention is required. Move to fresh air. If not breathing, give artificial respiration. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation.
<b>Self-protection of the first aider</b>	Use personal protective equipment Avoid contact with skin, eyes and clothing Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination

### 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**

Wear self-contained breathing apparatus and protective suit

## 6. ACCIDENTAL RELEASE MEASURES

### 6.1. Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Keep people away from and upwind of spill/leak.

See Section 12 for additional Ecological Information

### 6.2. Environmental precautions

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**

Avoid contact with skin, eyes and clothing. Use personal protective equipment as required. Wash contaminated clothing before reuse. Do not breathe dust/fume/gas/mist/vapors/spray. Do not eat, drink or smoke when using this product.

**7.2. Conditions for safe storage, including any incompatibilities**

Keep container tightly closed in a dry and well-ventilated place. Keep out of the reach of children.

**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 57-55-6		STEL: 450 ppm STEL: 1422 mg/m <sup>3</sup> STEL: 30 mg/m <sup>3</sup> TWA: 150 ppm TWA: 474 mg/m <sup>3</sup> TWA: 10 mg/m <sup>3</sup>			
ETHYL ALCOHOL 64-17-5		STEL: 3000 ppm STEL: 5760 mg/m <sup>3</sup> TWA: 1000 ppm TWA: 1920 mg/m <sup>3</sup>	TWA: 1000 ppm TWA: 1900 mg/m <sup>3</sup> STEL: 5000 ppm STEL: 9500 mg/m <sup>3</sup>	STEL: 1000 ppm STEL: 1910 mg/m <sup>3</sup>	TWA: 500 ppm TWA: 960 mg/m <sup>3</sup> Ceiling / Peak: 1000 ppm Ceiling / Peak: 1920 mg/m <sup>3</sup> Skin
Trade Secret		STEL: 125 ppm STEL: 458 mg/m <sup>3</sup> TWA: 100 ppm TWA: 366 mg/m <sup>3</sup>	TWA: 100 ppm TWA: 360 mg/m <sup>3</sup>	STEL: 125 ppm STEL: 458 mg/m <sup>3</sup> TWA: 100 ppm TWA: 366 mg/m <sup>3</sup>	TWA: 20 ppm TWA: 73 mg/m <sup>3</sup> Ceiling / Peak: 80 ppm Ceiling / Peak: 292 mg/m <sup>3</sup>
Trade Secret		STEL: 5 ppm STEL: 20 mg/m <sup>3</sup> TWA: 2 ppm TWA: 8 mg/m <sup>3</sup> Skin	VLCT: 2 ppm VLCT: 8 mg/m <sup>3</sup>	S* VLA-ED: 2 ppm VLA-ED: 8 mg/m <sup>3</sup>	Skin

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

Trade Secret		STEL: 125 ppm TWA: 100 ppm		TWA: 100 ppm TWA: 370 mg/m <sup>3</sup> STEL: 150 ppm STEL: 550 mg/m <sup>3</sup>	TWA: 100 ppm TWA: 360 mg/m <sup>3</sup>
Trade Secret		TWA: 2 ppm		TWA: 2 ppm TWA: 8 mg/m <sup>3</sup> STEL: 5 ppm STEL: 20 mg/m <sup>3</sup> Skin	TWA: 2 ppm TWA: 7.9 mg/m <sup>3</sup> Skin

Chemical Name	Austria	Sweden - Occupational Exposure Limits - TLVs (LLVs)	Switzerland	Poland	Norway
PROPYLENE GLYCOL 57-55-6					TWA: 25 ppm TWA: 79 mg/m <sup>3</sup> STEL: 37.5 ppm STEL: 118.5 mg/m <sup>3</sup>
ETHYL ALCOHOL 64-17-5	STEL 2000 ppm STEL 3800 mg/m <sup>3</sup> TWA: 1000 ppm TWA: 1900 mg/m <sup>3</sup>	500 ppm NGV 1000 mg/m <sup>3</sup> NGV	STEL: 1000 ppm STEL: 1920 mg/m <sup>3</sup> TWA: 500 ppm TWA: 960 mg/m <sup>3</sup>	TWA: 1900 mg/m <sup>3</sup>	TWA: 500 ppm TWA: 950 mg/m <sup>3</sup> STEL: 625 ppm STEL: 1187.5 mg/m <sup>3</sup>
Trade Secret	STEL 200 ppm STEL 720 mg/m <sup>3</sup> TWA: 100 ppm TWA: 360 mg/m <sup>3</sup>		STEL: 80 ppm STEL: 292 mg/m <sup>3</sup> TWA: 20 ppm TWA: 73 mg/m <sup>3</sup>	STEL: 400 mg/m <sup>3</sup> TWA: 200 mg/m <sup>3</sup>	TWA: 50 ppm TWA: 180 mg/m <sup>3</sup> STEL: 75 ppm STEL: 225 mg/m <sup>3</sup>
Trade Secret	Skin MAK: 5 ppm MAK: 20 mg/m <sup>3</sup>	2 ppm NGV 8 mg/m <sup>3</sup> NGV	Skin MAK: 2 ppm MAK: 8 mg/m <sup>3</sup>	NDSch: 25 mg/m <sup>3</sup> NDS: 10 mg/m <sup>3</sup> Skin	TWA: 2 ppm TWA: 8 mg/m <sup>3</sup> Skin STEL: 4 ppm STEL: 16 mg/m <sup>3</sup>

Component	Ireland
PROPYLENE GLYCOL 57-55-6 ( 30-50% )	TWA: 150 ppm TWA: 470 mg/m <sup>3</sup> TWA: 10 mg/m <sup>3</sup>
ETHYL ALCOHOL 64-17-5 ( 30-50% )	STEL: 1000 ppm
Trade Secret ( 1-5% )	TWA: 100 ppm TWA: 360 mg/m <sup>3</sup> STEL: 125 ppm STEL: 450 mg/m <sup>3</sup>
Trade Secret ( <1 )	TWA: 2 ppm TWA: 8 mg/m <sup>3</sup> STEL: 5 ppm STEL: 20 mg/m <sup>3</sup> Skin

**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** Impervious gloves Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact

**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 Avoid contact with skin, eyes and clothing Wash hands before breaks and immediately after handling the product Keep away from food, drink and animal feeding stuffs

**Environmental Exposure Controls** No information available

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### 9.1. Information on basic physical and chemical properties

<b>Physical state</b>	liquid	<b>Appearance</b>	clear
<b>Odor</b>	typical of brandy	<b>Color</b>	colorless
<b>Property</b>	<b>Values</b>	<b>Method</b>	
pH		No information available	
Melting/freezing point		No information available	
Boiling point/boiling range		FCC Method	
Flash Point	27 °C / 81 °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	0.9380 - 0.9580	FCC Method	
Specific Gravity @ 20C	0.941 - 0.961	FCC Method	
Refractive Index	1.3829 - 1.4029	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	
<b>Explosive properties</b>	No information available		
<b>Oxidizing Properties</b>	No information available		

### 9.2. Other information

VOC Content(%)	74.1958265397698
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** 4.50914% 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** 7,551.00 mg/kg**Dermal** 31.00 mg/kg**Mist** 3.13 mg/l**Vapor** 204.00 mg/l

Chemical Name	Oral LD50	Dermal LD50	LC50 Inhalation
PROPYLENE GLYCOL	20000 mg/kg ( Rat )	20800 mg/kg ( Rabbit )	
ETHYL ALCOHOL			124.7 mg/L ( Rat ) 4 h
Trade Secret	1300 mg/kg ( Rat )	3970 µL/kg ( Rabbit )	
Trade Secret	50 mg/kg ( Rat )		

**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

Chemical Name	European Union
Trade Secret	Category 3

**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		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
Trade Secret	493: 72 h Desmodesmus subspicatus mg/L EC50 181: 96 h Desmodesmus subspicatus mg/L EC50	700: 96 h Salmo gairdneri mg/L LC50 static	260: 48 h Daphnia magna mg/L EC50
Trade Secret		13.4-19.3: 96 h Pimephales promelas mg/L LC50 static 16.79-26.35: 96 h Pimephales promelas mg/L LC50 flow-through	29: 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	1.28
Trade Secret	0.67

### 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		
Chemical Name	EU - Endocrine Disruptors Candidate List	EU - Endocrine Disruptors - Evaluated Substances	Japan - Endocrine Disruptor Information
Trade Secret	Group III Chemical		

## 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



**Other Information** According to the European Waste Catalogue, Waste Codes are not product specific, but application specific Waste codes should be assigned by the user based on the application for which the product was used

## 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 - Water Hazard Classes
PROPYLENE GLYCOL 57-55-6	Hazard Class 1
ETHYL ALCOHOL 64-17-5	Hazard Class 1
Trade Secret	Hazard Class 1
Trade Secret	Hazard Class 2

#### **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), Japan (ENCS), 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

### Risk Combination Phrases

R23/25 - Toxic by inhalation and if swallowed  
R36/37/38 - Irritating to eyes, respiratory system and skin

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

H226 - Flammable liquid and vapor H332 - Harmful if inhaled H319 - Causes serious eye irritation H225 - Highly flammable liquid and vapor H351 - Suspected of causing cancer if inhaled H316 - Causes mild skin irritation H301 - Toxic if swallowed H312 - Harmful in contact with skin H227 - Combustible liquid H330 - Fatal if inhaled

Revision Date	23-Dec-2015
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

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.