



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

**1.1. Product identifier**

**Number** 662TTB

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

**Product name** PURE ALMOND EXTRACT, NATURAL  
**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 oral toxicity	Category 4
Acute dermal toxicity	Category 4
Acute inhalation toxicity - Vapor	Category 4
Serious eye damage/eye irritation	Category 2
Carcinogenicity	Category 1A
Specific target organ toxicity (single exposure)	Category 3
Acute aquatic toxicity	Category 1
Chronic aquatic toxicity	Category 1
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)**  
Xn - Harmful

**R-code(s)**  
Xn;R22

**2.2. Label elements**

**Signal Word**

Danger

**Hazard Statements**

H319 - Causes serious eye irritation

H350 - May cause cancer

H410 - Very toxic to aquatic life with long lasting effects

May cause respiratory irritation. May cause drowsiness or dizziness

H226 - Flammable liquid and vapor

**Precautionary Statements**

P322 - Specific measures (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 %	Classification according to Directive 67/548/EEC or 1999/45/EC	Classification according to Regulation (EC) No. 1272/2008 [CLP]	REACH Registration Number
BENZALDEHYDE	Present	100-52-7		30-50%	Xn; R22	Acute Tox. 4 (H302) Aquatic Acute 2 (H401) (EFFA) Eye Irrit. 1 (H319) (EFFA) Skin Irrit. 3 (316) (EFFA) Acute Tox. 4 (H302) (EFFA) Flam. Liq. 4 (H227)(EFFA) Acute Tox. 4 (H332)(EFFA) Aquatic Acute 2 (H401) Eye Irrit. 1 (H319) Skin Irrit. 3 (H316) Acute Tox. 4 (H302) Acute Tox. 4 (H332)	No data available
ETHYL ALCOHOL	200-578-6	64-17-5		1-5%	F; R11	Flam. Liq. 2 (H225) Flam. Liq. 2 (H225)	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>	If symptoms persist, call a physician Do not breathe dust/fume/gas/mist/vapors/spray Do not get in eyes, on skin, or on clothing
<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 If symptoms persist, call a physician
<b>Skin contact</b>	Consult a physician if necessary. Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes.
<b>Ingestion</b>	Rinse mouth. Drink plenty of water. If symptoms persist, call a physician. Do NOT induce vomiting.
<b>Inhalation</b>	Move to fresh air. Call a physician. If breathing is irregular or stopped, administer 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

### 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 entry into waterways, sewers, basements or confined areas. Do not flush into surface water or sanitary sewer system. 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

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
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>	VME: 1000 ppm VME: 1900 mg/m <sup>3</sup> VLCT: 5000 ppm VLCT: 9500 mg/m <sup>3</sup>	VLA-ED: 1000 ppm VLA-ED: 1910 mg/m <sup>3</sup>	MAK: 500 ppm MAK: 960 mg/m <sup>3</sup> Ceiling / Peak: 1000 ppm Ceiling / Peak: 1920 mg/m <sup>3</sup> Skin TWA: 500 ppm TWA: 960 mg/m <sup>3</sup>

Chemical Name	Italy	Portugal	The Netherlands	Finland	Denmark
BENZALDEHYDE 100-52-7				TWA: 1 ppm TWA: 4.4 mg/m <sup>3</sup> STEL: 4 ppm STEL: 17.4 mg/m <sup>3</sup> Ceiling: 4 ppm Ceiling: 17.4 mg/m <sup>3</sup>	
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>

Chemical Name	Austria	Sweden - Occupational Exposure Limits - TLVs (LLVs)	Switzerland	Poland	Norway
BENZALDEHYDE 100-52-7				STEL: 40 mg/m <sup>3</sup> TWA: 10 mg/m <sup>3</sup>	
ETHYL ALCOHOL 64-17-5	STEL 2000 ppm STEL 3800 mg/m <sup>3</sup> MAK: 1000 ppm MAK:	500 ppm NGV 1000 mg/m <sup>3</sup> NGV	STEL: 1000 ppm STEL: 1920 mg/m <sup>3</sup> MAK: 500 ppm MAK:	NDS: 1900 mg/m <sup>3</sup>	TWA: 500 ppm TWA: 950 mg/m <sup>3</sup> STEL: 625 ppm STEL:

	1900 mg/m <sup>3</sup>		960 mg/m <sup>3</sup>		1187.5 mg/m <sup>3</sup>
<b>Component</b>			<b>Ireland</b>		
ETHYL ALCOHOL 64-17-5 ( 1-5% )			TWA: 1000 ppm TWA: 1900 mg/m <sup>3</sup>		

**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** Do not allow material to contaminate ground water system

## 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 almond	<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	29 °C / 85 °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	0.9400 - 0.9700	FCC Method	
Specific Gravity @ 20C	0.943 - 0.973	FCC Method	
Refractive Index	1.3439 - 1.3739	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(%)	34.5
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

<b>Inhalation</b>	There is no data available for this product
<b>Eye contact</b>	There is no data available for this product
<b>Skin contact</b>	There is no data available for this product
<b>Ingestion</b>	There is no data available for this product
<b>Acute toxicity</b>	65.5% 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):

<b>Oral</b>	1,365.00 mg/kg
<b>Dermal</b>	1,337.00 mg/kg
<b>Inhalation</b>	
<b>Mist</b>	1,014,981.11 mg/l
<b>Vapor</b>	11.77 mg/l

<b>Skin corrosion/irritation</b>	No information available
<b>Eye damage/irritation</b>	No information available
<b>Sensitization</b>	No information available
<b>Germ Cell Mutagenicity</b>	No information available
<b>Carcinogenicity</b>	No information available

<b>Specific target organ systemic toxicity (single exposure)</b>	No information available
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<b>Specific target organ systemic toxicity (repeated exposure)</b>	No information available
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<b>Target Organ Effects</b>	Blood Central nervous system Eyes Liver Reproductive system Respiratory system Skin
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<b>Aspiration hazard</b>	No information available
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## 12. ECOLOGICAL INFORMATION

### 12.1. Toxicity

<b>Ecotoxicity effects</b>	Contains no substances known to be hazardous to the environment or not degradable in waste water treatment plants
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Chemical Name	Toxicity to algae	Toxicity to fish	Toxicity to daphnia and other aquatic invertebrates
BENZALDEHYDE		10.6 - 11.8: 96 h Oncorhynchus mykiss mg/L LC50 flow-through 12.69: 96 h Oncorhynchus mykiss mg/L LC50 static 0.8 - 1.44: 96 h Lepomis macrochirus mg/L LC50 flow-through 6.8 - 8.53: 96 h Pimephales promelas mg/L LC50 flow-through 7.5: 96 h Lepomis	50: 24 h Daphnia magna mg/L EC50

ETHYL ALCOHOL		macrochirus mg/L LC50 static 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
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**12.2. Persistence and degradability**

No information available

**12.3. Bioaccumulative potential**

No information available

Chemical Name	log Pow
BENZALDEHYDE	1.48
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****13. DISPOSAL CONSIDERATIONS****13.1. Waste treatment methods**

<b>Waste from residues / unused products</b>	Dispose of in accordance with local regulations
<b>Contaminated packaging</b>	Empty containers should be taken to an approved waste handling site for recycling or disposal
<b>Other Information</b>	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**

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

**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
BENZALDEHYDE 100-52-7	Hazard Class 2
ETHYL ALCOHOL 64-17-5	Hazard Class 1

#### 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), Korea (ECL), China (IECSC), Japan (ENCS), Philippines (PICCS).

TSCA	Complies
EINECS/ELINCS	Complies
DSL/NDSL	Complies
PICCS	Complies
ENCS	Complies
IECSC	Complies
AICS	Complies
KECL	Complies

#### 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

H302 - Harmful if swallowed H401 - Toxic to aquatic life H319 - Causes serious eye irritation H227 - Combustible liquid H332 - Harmful if inhaled  
 H316 - Causes mild skin irritation H225 - Highly flammable liquid and vapor

Revision Date	31-Aug-2016
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

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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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