



This safety data sheet complies with the requirements of:  
Regulation (EC) No. 1907/2006 and Regulation (EC) No. 1272/2008

Revision Date 03-Jan-2018

Version 1

## Section 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

### 1.1. Product identifier

**Product Code(s)** 509BEV  
**Product name** TAMARIND EXTRACT, NATURAL WONF

**Pure substance/mixture** Mixture  
Contains BENZYL ALCOHOL

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

**Recommended Use** Ingredient for further processing

**Uses advised against** No information available

### 1.3. Details of the supplier of the safety data sheet

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

#### 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

## Section 2: HAZARDS IDENTIFICATION

### 2.1. Classification of the substance or mixture

REGULATION (EC) No 1272/2008

<b>Acute toxicity - Inhalation (Vapors)</b>	Category 4 - (H332)
<b>Acute toxicity - Inhalation (Dusts/Mists)</b>	Category 2 - (H330)

**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)

Not dangerous

### 2.2. Label elements

**Product identifier**  
Contains BENZYL ALCOHOL



**Signal Word**  
Danger

**Hazard Statements**  
H330 - Fatal if inhaled

**Precautionary Statements - EU (§28, 1272/2008)**

P310 - Immediately call a POISON CENTER or doctor  
 P304 + P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing  
 P403 + P233 - Store in a well-ventilated place. Keep container tightly closed  
 P320 - Specific treatment is urgent (see .? on this label)

**2.3. Other information**  
No information available

### Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

**3.1 Substances**

Chemical Name	EC-No	CAS-No	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
BENZYL ALCOHOL	202-859-9	100-51-6	1-5%	Xn; R20/22	Acute Tox. 5 (H333) Acute Tox. 4 (H302)	No data available
OCTYL ALCOHOL	203-917-6	111-87-5	<1%	-	Aquatic Acute 3 (H402) (EFFA) Eye Irrit. 1 (H319) (EFFA) Skin Irrit. 3 (316) (EFFA) Flam. Liq. 4 (H227)(EFFA)	No data available
ISOAMYL ALCOHOL	204-633-5	123-51-3	<1%	-	Flam. Liq. 3 (H226)(EFFA) Acute Tox. 4 (H332)(EFFA)	No data available
HEXYL ALCOHOL	Present	111-27-3	<1%	Xn; R22	Aquatic Acute 3 (H402) (EFFA) Eye Irrit. 1 (H319) (EFFA) Skin Irrit. 3 (316) (EFFA) Acute Tox. 4 (H302) (EFFA) Acute Tox. 4 (H312)(EFFA) Flam. Liq. 3 (H226)(EFFA) Acute Tox. 4 (H302)	No data available
MYRCENE	204-622-5	123-35-3	<1%	-	Eye Irrit. 1 (H319) (EFFA) Skin Irrit. 2 (315) (EFFA) Asp. Tox. 1 (H304) (EFFA) Eye Irrit. 1 (H319) Skin Irrit. 2 (H315)	No data available
BENZYL ACETATE	Present	140-11-4	<1%	-	Aquatic Acute 2 (H401) (EFFA) Skin Irrit. 3 (316) (EFFA) Acute Tox. 5 (H303)(EFFA) Flam. Liq. 4 (H227)(EFFA) Aquatic Acute 2 (H401) Skin Irrit. 3 (H316) Acute Tox. 5 (H303)	No data available

**For the full text of the R-phrases mentioned in this Section, see Section 16**

Full text of H- and EUH-phrases: see section 16

## Section 4: FIRST AID MEASURES

### 4.1. Description of first aid measures

<b>Inhalation</b>	Move to fresh air.
<b>Skin contact</b>	Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes.
<b>Eye contact</b>	Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.
<b>Ingestion</b>	Clean mouth with water and drink afterwards plenty of water.

### 4.2. Most important symptoms and effects, both acute and delayed

**Main Symptoms** No information available.

### 4.3. Indication of any immediate medical attention and special treatment needed

**Note to physicians** Treat symptomatically.

## Section 5: FIRE FIGHTING MEASURES

### 5.1. Extinguishing media

#### **Suitable Extinguishing Media**

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

#### **Unsuitable extinguishing media**

No information available

### 5.2. Special hazards arising from the substance or mixture

Thermal decomposition can lead to release of irritating gases and vapors

### 5.3. Advice for firefighters

Wear self-contained breathing apparatus and protective suit. Use personal protective equipment.

## Section 6: ACCIDENTAL RELEASE MEASURES

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

#### **Personal precautions**

Ensure adequate ventilation.

#### **For emergency responders**

Use personal protection recommended in Section 8.

### 6.2. Environmental precautions

Beware of vapors accumulating to form explosive concentrations. Vapors can accumulate in low areas.

### 6.3. Methods and material for containment and cleaning up

**Methods for containment** Prevent further leakage or spillage if safe to do so.

**Methods for cleaning up** Take up mechanically, placing in appropriate containers for disposal.

#### 6.4. Reference to other sections

See section 8 for more information. See section 13 for more information.

## Section 7: HANDLING AND STORAGE

### 7.1. Precautions for safe handling

#### **Advice on safe handling**

Ensure adequate ventilation.

#### **General Hygiene Considerations**

Handle in accordance with good industrial hygiene and safety practice.

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

#### **Storage Conditions**

Keep container tightly closed in a dry and well-ventilated place.

#### **Incompatible products**

None known based on information supplied.

### 7.3 Specific end use(s)

#### **Risk Management Methods (RMM)**

The information required is contained in this Material Safety Data Sheet.

## Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1. Control parameters

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>	-	-	-
ISOAMYL ALCOHOL 123-51-3	-	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>	-
MYRCENE 123-35-3	-	-	TWA: 1000 mg/m <sup>3</sup> STEL: 1500 mg/m <sup>3</sup>	-	-
BENZYL ACETATE 140-11-4	-	-	-	TWA: 10 ppm TWA: 62 mg/m <sup>3</sup>	-
Chemical Name	Italy	Portugal	The Netherlands	Finland	Denmark
BENZYL ALCOHOL 100-51-6	-	-	-	TWA: 10 ppm TWA: 45 mg/m <sup>3</sup>	-
ISOAMYL ALCOHOL 123-51-3	-	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>
BENZYL ACETATE 140-11-4	-	TWA: 10 ppm	-	-	TWA: 10 ppm TWA: 61 mg/m <sup>3</sup>
Chemical Name	Austria	Switzerland	Poland	Norway	Ireland
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>	TWA: 150 ppm TWA: 470 mg/m <sup>3</sup> TWA: 10 mg/m <sup>3</sup>
BENZYL ALCOHOL 100-51-6	-	-	NDS: 240 mg/m <sup>3</sup>	-	-

ISOAMYL ALCOHOL 123-51-3	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>	TWA: 100 ppm TWA: 360 mg/m <sup>3</sup> STEL: 125 ppm STEL: 450 mg/m <sup>3</sup>
MYRCENE 123-35-3	-	-	-	TWA: 40 ppm TWA: 275 mg/m <sup>3</sup> STEL: 60 ppm STEL: 343.75 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/face protection** Tightly fitting safety goggles.  
**Skin and body protection** Long sleeved clothing.

**Environmental Exposure Controls** No information available.

**Section 9: PHYSICAL AND CHEMICAL PROPERTIES**

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

**Physical state** liquid  
**Appearance** viscous  
**Odor** typical of tamarind; sour; astringent; fruity and tea-like  
**Color** dark brown

<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	93 °C / 200 °F	Closed cup
Evaporation rate		FCC Method
Flammability (solid, gas)		No information available
Flammability Limits in Air		
Upper flammability limit		No information available
lower flammability limit		No information available
Vapor pressure mm Hg 20°C		No information available
Vapor density		No information available
Relative density		No information available
Specific Gravity @ 25C	1.187 - 1.287	FCC Method
Specific Gravity @ 20C	1.19 - 1.29	FCC Method
Refractive Index		FCC Method
Water solubility		No information available
Solubility in other solvents		No information available
Partition coefficient: n-octanol/water		No information available
Autoignition temperature		No information available
Decomposition temperature		No information available
Viscosity, kinematic		No information available
Viscosity, dynamic		No information available
Explosive properties	No information available	
Oxidizing Properties	No information available	

**9.2. Other information**

**Softening point** No information available

<b>Molecular Weight</b>	No information available
<b>VOC Content(%)</b>	No information available
<b>Density VALUE</b>	No information available
<b>Bulk Density VALUE</b>	No information available

## Section 10: STABILITY AND REACTIVITY

### 10.1. Reactivity

No data available.

### 10.2. Chemical stability

Stable under normal conditions.

#### Explosion data

Sensitivity to Mechanical Impact	none.
Sensitivity to Static Discharge	Yes.

### 10.3. Possibility of hazardous reactions

#### **Hazardous Reactions**

None under normal processing.

### 10.4. Conditions to avoid

None known.

### 10.5. Incompatible materials

No information available.

### 10.6. Hazardous decomposition products

None under normal use conditions.

## Section 11: TOXICOLOGICAL INFORMATION

### 11.1. Information on toxicological effects

#### **Acute toxicity**

#### **Product Information**

Product does not present an acute toxicity hazard based on known or supplied information.

<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.

#### **The following values are calculated based on chapter 3.1 of the GHS document**

<b>ATEmix (oral)</b>	12,208.00 mg/kg
<b>ATEmix (dermal)</b>	14,996.00 mg/kg
<b>ATEmix (inhalation-dust/mist)</b>	0.07 mg/l
<b>ATEmix (inhalation-vapor)</b>	15.00 mg/l

#### **Unknown Acute Toxicity**

99.441% of the mixture consists of ingredient(s) of unknown toxicity.  
 65.011 % of the mixture consists of ingredient(s) of unknown acute oral toxicity.  
 65.011 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity.  
 99.441 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas).  
 97.941 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapor).  
 97.941 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist).

Chemical Name	Oral LD50	Dermal LD50	LC50 Inhalation
PROPYLENE GLYCOL	2000 mg/kg ( Rat )	20800 mg/kg ( Rabbit )	
BENZYL ALCOHOL	1230 mg/kg ( Rat )	2000 mg/kg ( Rabbit )	8.8 mg/L ( Rat ) 4 h

<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>Reproductive toxicity</b>	No information available.
<b>Specific target organ systemic toxicity (single exposure)</b>	No information available.
<b>Specific target organ systemic toxicity (repeated exposure)</b>	No information available.
<b>Aspiration hazard</b>	No information available.

## Section 12: ECOLOGICAL INFORMATION

### 12.1. Toxicity

65.031% of the mixture consists of component(s) of unknown hazards to the aquatic environment

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
BENZYL ALCOHOL	35: 3 h Anabaena variabilis mg/L EC50	10: 96 h Lepomis macrochirus mg/L LC50 static 460: 96 h Pimephales promelas mg/L LC50 static	23: 48 h water flea mg/L EC50
OCTYL ALCOHOL	14: 48 h Desmodesmus subspicatus mg/L EC50 static	11.4 - 12.9: 96 h Pimephales promelas mg/L LC50 flow-through 17.68: 96 h Oncorhynchus mykiss mg/L LC50 static	15 - 26: 24 h Daphnia magna mg/L EC50
ISOAMYL ALCOHOL	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
HEXYL ALCOHOL	-	89.7 - 106: 96 h Pimephales promelas mg/L LC50 flow-through 144: 96 h Brachydanio rerio mg/L LC50 static	201: 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
BENZYL ALCOHOL	1.1
OCTYL ALCOHOL	3.15
ISOAMYL ALCOHOL	1.28
HEXYL ALCOHOL	2.03
BENZYL ACETATE	1.96

**12.4. Mobility in soil****Mobility in soil**

No information available.

**12.5. Results of PBT and vPvB assessment**

No information available.

**12.6. Other adverse effects**

No information available

## Section 13: DISPOSAL CONSIDERATIONS

**13.1. Waste treatment methods**

**Waste from residues / unused products**      Dispose of in accordance with local regulations.

**Contaminated packaging**      Empty remaining contents.

## Section 14: TRANSPORT INFORMATION

**IMDG / IMO**

14.1 UN/ID No      1760  
 14.2 Proper shipping name      CORROSIVE LIQUID, N.O.S.  
 14.3 Hazard class      8  
 14.4 Packing Group      III

**DOT/ADR/RID**

14.1 UN/ID No      1760  
 14.2 Proper shipping name      CORROSIVE LIQUID, N.O.S.  
 14.3 Hazard class      8  
 14.4 Packing Group      III

**ICAO/IATA**

14.1 UN/ID No      1760  
 14.2 Proper shipping name      CORROSIVE LIQUID, N.O.S.  
 14.3 Hazard class      8  
 14.4 Packing Group      III  
 14.5 Environmental hazard      Not applicable  
 14.6 Special Provisions      None

## Section 15: REGULATORY INFORMATION

**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**



**European Union**

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work

**Authorizations and/or restrictions on use:**

This product does not contain substances subject to authorization (Regulation (EC) No. 1907/2006 (REACH), Annex XIV) This product does not contain substances subject to restriction (Regulation (EC) No. 1907/2006 (REACH), Annex XVII)

**Persistent Organic Pollutants**

Not applicable

**Ozone-depleting substances (ODS) regulation (EC) 1005/2009** Not applicable

**International Inventories**

<b>TSCA</b>	-
<b>DSL/NDSL</b>	-
<b>EINECS/ELINCS</b>	-
<b>ENCS</b>	-
<b>IECSC</b>	-
<b>KECL</b>	-
<b>PICCS</b>	-
<b>AICS</b>	-

**Legend:**

**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory

**DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List

**EINECS/ELINCS** - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

**ENCS** - Japan Existing and New Chemical Substances

**IECSC** - China Inventory of Existing Chemical Substances

**KECL** - Korean Existing and Evaluated Chemical Substances

**PICCS** - Philippines Inventory of Chemicals and Chemical Substances

**AICS** - Australian Inventory of Chemical Substances

**15.2. Chemical safety assessment**

No information available

**Section 16: OTHER INFORMATION****Key or legend to abbreviations and acronyms used in the safety data sheet****Full text of R-phrases referred to under sections 2 and 3**

No information available

R20/22 - Harmful by inhalation and if swallowed

**Full text of H-Statements referred to under section 3**

H333 - May be harmful if inhaled

H302 - Harmful if swallowed

H402 - Harmful to aquatic life

H319 - Causes serious eye irritation

H312 - Harmful in contact with skin

H226 - Flammable liquid and vapor

H227 - Combustible liquid

H304 - May be fatal if swallowed and enters airways

H315 - Causes skin irritation

H332 - Harmful if inhaled

H401 - Toxic to aquatic life

H303 - May be harmful if swallowed  
H316 - Causes mild skin irritation

**Legend**

SVHC: Substances of Very High Concern for Authorization:

**Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

TWA:	Time weighted average	STEL:	Short term exposure limit
Ceiling:	Maximum limit value:	*	Skin designation

**Revision Date** 03-Jan-2018

**Reason for revision:** Not applicable.

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