



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

**1.1. Product identifier**

**Number** 728CON

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

**Product name** CHOCOLATE FUDGE BROWNIE TYPE, NATURAL FLAVOR BLEND ( OIL SOLUBLE)

**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 5
Acute inhalation toxicity - dust/mist	Category 2
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**  
Danger

**Hazard Statements**

H303 - May be harmful if swallowed  
H330 - Fatal if inhaled

H227 - Combustible liquid

**Precautionary Statements**

P310 - Immediately call a POISON CENTER or doctor/ physician  
P304 + P340 - IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing  
P403 + P233 - Store in a well-ventilated place. Keep container tightly closed  
P260 - Do not breathe dust/fume/gas/mist/vapors/spray  
P320 - Specific treatment is urgent (see .? on this label)  
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 %	Classification according to Directive 67/548/EEC or 1999/45/EC	Classification according to Regulation (EC) No. 1272/2008 [CLP]	REACH Registration Number
BENZYL ALCOHOL	202-859-9	100-51-6		5-10%	Xn; R20/22	Acute Tox. 5 (H333) Acute Tox. 4 (H302)	No data available
ISOVALERALDEHYD E	Present	590-86-3		<1	-	Aquatic Acute 2 (H401) (EFFA) Skin Sens. 1 (H317) (EFFA) Eye Irrit. 1 (H319) (EFFA) Skin Irrit. 3 (316) (EFFA) Flam. Liq. 2 (H225) (EFFA) Acute Tox. 5 (H303)(EFFA)	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 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**

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**

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
ISOVALERALDEHYDE 590-86-3					TWA: 10 ppm TWA: 39 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>	
Chemical Name	Austria	Sweden - Occupational Exposure Limits - TLVs (LLVs)	Switzerland	Poland	Norway
BENZYL ALCOHOL 100-51-6				NDS: 240 mg/m <sup>3</sup>	
ISOVALERALDEHYDE 590-86-3	STEL 10 ppm STEL 39 mg/m <sup>3</sup> TWA: 10 ppm TWA: 39 mg/m <sup>3</sup> Ceiling 10 ppm Ceiling 39 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** 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>	characteristic of chocolate fudge	<b>Color</b>	Pale yellow

<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		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	0.9327 - 0.9627	FCC Method
Specific Gravity @ 20C	0.9357 - 0.9657	FCC Method
Refractive Index	1.4539 - 1.4839	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(%)	6.50400001136586
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>	44.264% 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>	3,797.00 mg/kg
<b>Dermal</b>	15,929.00 mg/kg

**Inhalation**

<b>Mist</b>	0.47 mg/l
<b>Vapor</b>	102.00 mg/l

Chemical Name	Oral LD50	Dermal LD50	LC50 Inhalation
BENZYL ALCOHOL	1230 mg/kg ( Rat )	2000 mg/kg ( Rabbit )	8.8 mg/L ( Rat ) 4 h
ISOVALERALDEHYDE	5600 mg/kg ( Rat )	2730 mg/kg ( Rabbit )	42700 mg/m <sup>3</sup> ( 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>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>	No information available
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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
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
ISOVALERALDEHYDE	80: 72 h Desmodesmus subspicatus mg/L EC50 78: 96 h Desmodesmus subspicatus mg/L EC50	2.98 - 3.54: 96 h Pimephales promelas mg/L LC50 flow-through 53: 96 h Leuciscus idus mg/L LC50 static	177: 48 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
ISOVALERALDEHYDE	1.31

**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** Not regulated

**IMDG / IMO** Not regulated

**ICAO/IATA** Not 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
BENZYL ALCOHOL 100-51-6	Hazard Class 1
ISOVALERALDEHYDE 590-86-3	Hazard Class 1

**International Inventories**

All of the components in the product are on the following Inventory lists: No information available.

**TSCA** -

EINECS/ELINCS	-
DSL/NDSL	-
PICCS	-
ENCS	-
IECSC	-
AICS	-
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**

H333 - May be harmful if inhaled H302 - Harmful if swallowed H401 - Toxic to aquatic life H317 - May cause an allergic skin reaction H319 - Causes serious eye irritation H225 - Highly flammable liquid and vapor H303 - May be harmful if swallowed

Revision Date 11-Apr-2016

Revision Note Not applicable.

Revision# 1

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

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.

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