



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

Revision Date 08-Jul-2019

Version 1

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

**1.1. Product identifier**

**Product Code(s)** 750CBD  
**Product name** MINT CHOCOLATE 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** 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>Serious eye damage/eye irritation</b>	Category 2 - (H319)
<b>Carcinogenicity</b>	Category 1A - (H350)

**2.2. Label elements**

**Product identifier**  
 Contains ETHYL ALCOHOL



**Signal Word**  
 Danger

**Hazard Statements**

H319 - Causes serious eye irritation

H350 - May cause cancer

Contains ISOVALERALDEHYDE EUH208 - May produce an allergic reaction

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

P201 - Obtain special instructions before use

P280 - Wear protective gloves/protective clothing/eye protection/face protection

P308 + P313 - IF exposed or concerned: Get medical advice/attention

**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 Regulation (EC) No. 1272/2008 [CLP]	REACH Registration Number
ETHYL ALCOHOL	200-578-6	64-17-5	10-15%	Flam. Liq. 2 (H225) Eye Irrit. 1 (H319)	No data available
LAEVO MENTHOL	Present	2216-51-5	1-5%	Aquatic Acute 3 (H402) (EFFA) Eye Irrit. 1 (H319) (EFFA) Skin Irrit. 2 (315) (EFFA) Acute Tox. 5 (H303)(EFFA) Flam. Liq. 4 (H227)(EFFA)	No data available
ISOVALERALDEHYDE	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
L-Limonene	227-815-6	5989-54-8	<1%	Aquatic Acute 1 (H400) Skin Sens. 1 (H317) Skin Irrit. 2 (H316) Asp. Tox. 1 (H304) Aquatic Chronic 1 (H410) Flam. Liq. 3 (H226)	No data available
METHYL N-AMYL KETONE FCC (2-Heptanone)	Present	110-43-0	<1%	Acute Tox. 4 (H302) Acute Tox. 4 (H302) (EFFA) Flam. Liq. 3 (H226)(EFFA) Acute Tox. 4 (H332)(EFFA) Flam. Liq. 3 (H226) Acute Tox. 4 (H332)	No data available
DIMETHYL SULFIDE	200-846-2	75-18-3	<1%	Skin Irrit. 3 (316) (EFFA) Acute Tox. 3 (H301) (EFFA) Flam. Liq. 2 (H225) (EFFA)	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****General advice**

Immediate medical attention is required. Show this material safety data sheet to the doctor in attendance.

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<b>Inhalation</b>	Move to fresh air.
<b>Skin contact</b>	Wash off immediately with plenty of water.
<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.
<b>Self-protection of the first aider</b>	Remove all sources of ignition.

**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**

Remove all sources of ignition. Evacuate personnel to safe areas. Ensure adequate ventilation.

**For emergency responders**

Use personal protection recommended in Section 8.

**6.2. Environmental precautions**

Prevent further leakage or spillage if safe to do so. Prevent product from entering drains. 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**

Dam up. Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Pick up and transfer to properly labeled containers.

**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. Keep away from open flames, hot surfaces and sources of ignition. Take precautionary measures against static discharges. Use only in an area containing flame proof equipment. To avoid ignition of vapors by static electricity discharge, all metal parts of the equipment must be grounded.

#### General Hygiene Considerations

When using, do not eat, drink or smoke. Provide regular cleaning of equipment, work area and clothing.

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

#### Storage Conditions

Keep tightly closed in a dry and cool place. Keep in properly labeled containers.

#### 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
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>	-
METHYL N-AMYL KETONE FCC (2-Heptanone) 110-43-0	S* TWA 50 ppm TWA: 238 mg/m <sup>3</sup> STEL 100 ppm STEL: 475 mg/m <sup>3</sup>	STEL: 100 ppm STEL: 475 mg/m <sup>3</sup> TWA: 50 ppm TWA: 237 mg/m <sup>3</sup> Skin	TWA: 50 ppm TWA: 238 mg/m <sup>3</sup> STEL: 100 ppm STEL: 475 mg/m <sup>3</sup>	S* STEL: 100 ppm STEL: 474 mg/m <sup>3</sup> TWA: 50 ppm TWA: 237 mg/m <sup>3</sup>	-
DIMETHYL SULFIDE 75-18-3	-	-	-	VLA-ED: 10 ppm	-
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>
METHYL N-AMYL KETONE FCC (2-Heptanone) 110-43-0	TWA: 50 ppm TWA: 238 mg/m <sup>3</sup> STEL: 100 ppm STEL: 475 mg/m <sup>3</sup> Skin	TWA: 50 ppm	TWA: 233 mg/m <sup>3</sup>	TWA: 50 ppm TWA: 240 mg/m <sup>3</sup> STEL: 75 ppm STEL: 360 mg/m <sup>3</sup> Skin	TWA: 50 ppm TWA: 238 mg/m <sup>3</sup> Skin
DIMETHYL SULFIDE 75-18-3	-	TWA: 10 ppm	-	-	-
Chemical Name	Austria	Switzerland	Poland	Norway	Ireland
ETHYL ALCOHOL 64-17-5	STEL 2000 ppm STEL 3800 mg/m <sup>3</sup> MAK: 1000 ppm MAK: 1900 mg/m <sup>3</sup>	STEL: 1000 ppm STEL: 1920 mg/m <sup>3</sup> MAK: 500 ppm MAK: 960 mg/m <sup>3</sup>	NDS: 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>	TWA: 1000 ppm TWA: 1900 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>				
L-Limonene 5989-54-8	-	-	-	TWA: 25 ppm TWA: 140 mg/m <sup>3</sup> STEL: 37.5 ppm STEL: 175 mg/m <sup>3</sup>	-
METHYL N-AMYL KETONE FCC (2-Heptanone) 110-43-0	Skin STEL 100 ppm STEL 473 mg/m <sup>3</sup> TWA: 50 ppm TWA: 237 mg/m <sup>3</sup>	TWA: 50 ppm TWA: 235 mg/m <sup>3</sup>	STEL: 475 mg/m <sup>3</sup> TWA: 238 mg/m <sup>3</sup>	TWA: 25 ppm TWA: 115 mg/m <sup>3</sup> Skin STEL: 37.5 ppm STEL: 143.75 mg/m <sup>3</sup>	TWA: 50 ppm TWA: 238 mg/m <sup>3</sup> STEL: 100 ppm STEL: 475 mg/m <sup>3</sup> Skin
DIMETHYL SULFIDE 75-18-3	-	-	-	-	TWA: 20 ppm

**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** Antistatic boots. Wear fire/ flame resistant/ retardant clothing. Impervious gloves.
- Respiratory protection** NIOSH/MSHA approved respiratory protection is required to be worn.

**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** clear  
**Aroma** characteristic of mint chocolate  
**Color** Pale yellow

<u>Property</u>	<u>Values</u>	<u>• Method</u>
<b>pH</b>		No information available
<b>Melting/freezing point</b>		No information available
<b>Boiling point/boiling range</b>		FCC Method
<b>Flash Point</b>	93 °C / 200 °F	Closed cup
<b>Evaporation rate</b>		FCC Method
<b>Flammability (solid, gas)</b>		No information available
<b>Flammability Limits in Air</b>		
<b>Upper flammability limit</b>		No information available
<b>lower flammability limit</b>		No information available
<b>Vapor pressure mm Hg 20°C</b>		No information available
<b>Vapor density</b>		No information available
<b>Relative density</b>		No information available
<b>Specific Gravity @ 25C</b>	0.9237 - 0.9537	FCC Method
<b>Specific Gravity @ 20C</b>	0.9267 - 0.9567	FCC Method
<b>Refractive Index</b>	1.428 - 1.458	FCC Method
<b>Water solubility</b>		No information available
<b>Solubility in other solvents</b>		No information available
<b>Partition coefficient: n-octanol/water</b>		No information available
<b>Autoignition temperature</b>		No information available
<b>Decomposition temperature</b>		No information available
<b>Viscosity, kinematic</b>		No information available

Viscosity, dynamic	No information available	No information available
Explosive properties	No information available	
Oxidizing Properties	No information available	

**9.2. Other information**

Softening point	No information available
Molecular Weight	No information available
VOC Content(%)	No information available
Density VALUE	No information available
Bulk Density VALUE	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**

Heat, flames and sparks.

**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>	5,130.00 mg/kg
<b>ATEmix (dermal)</b>	7,739.00 mg/kg
<b>ATEmix (inhalation-dust/mist)</b>	82,049.23 mg/l
<b>Unknown Acute Toxicity</b>	

96.8635% of the mixture consists of ingredient(s) of unknown toxicity.  
 0.72275 % of the mixture consists of ingredient(s) of unknown acute oral toxicity.  
 91.1135 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity.  
 96.8635 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas).  
 96.8635 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapor).  
 83.7685 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist).

**Oral LD50**

Chemical Name	Oral LD50	Dermal LD50	LC50 Inhalation
ETHYL ALCOHOL	7060 mg/kg ( Rat )		124.7 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>Target Organ Effects</b>	Blood, Central nervous system, Eyes, Liver, Reproductive system, Respiratory system, Skin.
<b>Aspiration hazard</b>	No information available.

**Section 12: ECOLOGICAL INFORMATION**

**12.1. Toxicity**

1.06525% of the mixture consists of components(s) of unknown hazards to the aquatic environment

Chemical Name	Toxicity to algae	Toxicity to fish	Toxicity to daphnia and other aquatic invertebrates
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 10800: 24 h Daphnia magna mg/L EC50 2: 48 h Daphnia magna mg/L EC50 Static
LAEVO MENTHOL	-	18.9: 96 h Pimephales promelas mg/L LC50 flow-through	-
ISOVALERALDEHYDE	80: 72 h Desmodemus subspicatus mg/L EC50 78: 96 h Desmodemus 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
METHYL N-AMYL KETONE FCC (2-Heptanone)	-	126 - 137: 96 h Pimephales promelas mg/L LC50 flow-through	-
DIMETHYL SULFIDE	-	-	23: 48 h Daphnia pulex 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
ISOVALERALDEHYDE	1.31
METHYL N-AMYL KETONE FCC (2-Heptanone)	1.98

**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 Not regulated  
 14.2 Proper shipping name Not regulated  
 14.3 Hazard class Not regulated  
 14.4 Packing Group Not regulated

Not regulated

**DOT/ADR/RID**

14.1 UN/ID No Not regulated  
 14.2 Proper shipping name Not regulated  
 14.3 Hazard class Not regulated  
 14.4 Packing Group Not regulated

**ICAO/IATA**

14.1 UN/ID No Not regulated  
 14.2 Proper shipping name Not regulated  
 14.3 Hazard class Not regulated  
 14.4 Packing Group Not regulated  
 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

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

#### 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

R22 - Harmful if swallowed

R10 - Flammable

R51/53 - Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment

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

H302 - Harmful if swallowed

H226 - Flammable liquid and vapor

H332 - Harmful if inhaled  
H402 - Harmful to aquatic life  
H319 - Causes serious eye irritation  
H303 - May be harmful if swallowed  
H227 - Combustible liquid  
H401 - Toxic to aquatic life  
H317 - May cause an allergic skin reaction  
H225 - Highly flammable liquid and vapor  
H400 - Very toxic to aquatic life  
H316 - Causes mild skin irritation  
H304 - May be fatal if swallowed and enters airways  
H410 - Very toxic to aquatic life with long lasting effects  
H301 - Toxic if swallowed

**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** 08-Jul-2019

**Reason for revision:** Not applicable.

**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.