



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

Revision Date 25-Nov-2025

Version 2

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

1.1. Product identifier

Product Code(s) 330TTB
Product name BLUE RASPBERRY TYPE, NATURAL & ARTIFICIAL
(CONTAINS < 0.10% ARTIFICIAL TOP NOTE)

Pure substance/mixture Mixture
Contains ETHYL 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.
1361 Brass Mill Rd.
Suite E
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

Acute toxicity - Inhalation (Dusts/Mists)	Category 4 - (H332)
Serious eye damage/eye irritation	Category 2 - (H319)
Carcinogenicity	Category 1A - (H350)
Flammable liquids	Category 3 - (H226)

2.2. Label elements

Product identifier
Contains ETHYL ALCOHOL



Signal Word

Danger

Hazard Statements

H319 - Causes serious eye irritation

H332 - Harmful if inhaled

H350 - May cause cancer

H226 - Flammable liquid and vapor

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

P370 + P378 - In case of fire: Use .? to extinguish

P210 - Keep away from heat/sparks/open flames/hot surfaces. - No smoking

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
PROPYLENE GLYCOL	200-338-0	57-55-6	30-50%	No data available	No data available
ETHYL ALCOHOL	200-578-6	64-17-5	20-30%	Flam. Liq. 2 (H225) Eye Irrit. 1 (H319)	No data available
BENZYL ALCOHOL	202-859-9	100-51-6	<1%	Acute Tox. 5 (H333) Acute Tox. 4 (H302)	No data available
ETHYL ACETATE	Present	141-78-6	<1%	Eye Irrit. 1 (H319) (EFA) Flam. Liq. 2 (H225) (EFA) Eye Irrit. 1 (H319) (EUH066) Flam. Liq. 2 (H225) STOT SE 3 (H336) Eye Irrit. 2 (H319)	No data available
BENZALDEHYDE	Present	100-52-7	<1%	Acute Tox. 4 (H302) Aquatic Acute 2 (H401) (EFA) Eye Irrit. 1 (H319) (EFA) Skin Irrit. 3 (316) (EFA) Acute Tox. 4 (H302) (EFA) Flam. Liq. 4 (H227)(EFA) Acute Tox. 4 (H332)(EFA) Aquatic Acute 2 (H401) Eye Irrit. 1 (H319) Skin Irrit. 3 (H316) Acute Tox. 4 (H302) Acute Tox. 4 (H332)	No data available
ISOAMYL ACETATE	Present	123-92-2	<1%	Aquatic Acute 3 (H402) (EFA) (EUH066) Flam. Liq. 3 (H226)	No data available
DIMETHYL SULFIDE	200-846-2	75-18-3	<1%	Skin Irrit. 3 (316) (EFA) Acute Tox. 3 (H301) (EFA) Flam. Liq. 2 (H225) (EFA)	No data available
ISOBUTYL ACETATE	Present	110-19-0	<1%	Aquatic Acute 3 (H402) (EFA) Flam. Liq. 2 (H225) (EFA) (EUH066) Flam. Liq. 2 (H225)	No data available
ACETOPHENONE	202-708-7	98-86-2	<1%	Acute Tox. 4 (H302) Eye Irrit. 1 (H319) (EFA) Acute Tox. 4 (H302) (EFA) Eye Irrit. 2 (H319)	No data available
ISOAMYL ALCOHOL	204-633-5	123-51-3	<1%	Flam. Liq. 3 (H226)(EFA) Acute	No data available

				Tox. 4 (H332)(EFA)	
HEXYL ALCOHOL	Present	111-27-3	<1%	Aquatic Acute 3 (H402) (EFA) Eye Irrit. 1 (H319) (EFA) Skin Irrit. 3 (316) (EFA) Acute Tox. 4 (H302) (EFA) Acute Tox. 4 (H312)(EFA) Flam. Liq. 3 (H226)(EFA) Acute Tox. 4 (H302)	No data available
BENZYL ACETATE	Present	140-11-4	<1%	Aquatic Acute 2 (H401) (EFA) Skin Irrit. 3 (316) (EFA) Acute Tox. 5 (H303)(EFA) Flam. Liq. 4 (H227)(EFA) Aquatic Acute 2 (H401) Skin Irrit. 3 (H316) Acute Tox. 5 (H303)	No data available
Hexenal (Aldehyde C-6)	200-624-5	66-25-1	<1%	Eye Irrit. 1 (H319) (EFA) Skin Irrit. 3 (316) (EFA) Flam. Liq. 3 (H226)(EFA)	No data available
LIMONENE	227-813-5	5989-27-5	<1%	Aquatic Acute 1 (H400) Skin Sens. 1 (H317) Skin Irrit. 1 (H315) Asp. Tox. 1 (H304) Aquatic Chronic 1 (H410) Flam. Liq. 3 (H226)	No data available
PINENES	201-291-9	80-56-8	<1%	Aquatic Acute 1 (H400) Skin Sens. 1 (H317) Skin Irrit. 1 (H315) Asp. Tox. 1 (H304) Aquatic Chronic 1 (H410) Acute Tox. 5 (H303) Flam. Liq. 3 (H226)	No data available
P-CYMENE	202-796-7	99-87-6	<1%	Aquatic Acute 2 (H401) Skin Irrit. 3 (H316) Aquatic Chronic 2 (H411) Asp. Tox. 1 (H304) Acute Tox. 5 (H303) Flam. Liq. 3 (H226)	No data available
BENZONITRILE	202-855-7	100-47-0	NF	Acute Tox. 4 (H302) Acute Tox. 4 (H312)	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

Inhalation	Move to fresh air.
Skin contact	Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes.
Eye contact	Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.
Ingestion	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.
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4.3. Indication of any immediate medical attention and special treatment needed

Note to physicians	Treat symptomatically.
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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 ³ STEL: 30 mg/m ³ TWA: 150 ppm TWA: 474 mg/m ³ TWA: 10 mg/m ³	-	-	-
ETHYL ALCOHOL 64-17-5	-	STEL: 3000 ppm STEL: 5760 mg/m ³ TWA: 1000 ppm TWA: 1920 mg/m ³	VME: 1000 ppm VME: 1900 mg/m ³ VLCT: 5000 ppm VLCT: 9500 mg/m ³	VLA-ED: 1000 ppm VLA-ED: 1910 mg/m ³	-
ETHYL ACETATE 141-78-6	-	STEL: 400 ppm TWA: 200 ppm	TWA: 400 ppm TWA: 1400 mg/m ³	TWA: 400 ppm TWA: 1460 mg/m ³	-
ISOAMYL ACETATE 123-92-2	TWA 50 ppm TWA 270 mg/m ³ STEL 100 ppm STEL 540 mg/m ³	TWA: 50 ppm TWA: 270 mg/m ³	TWA: 50 ppm TWA: 270 mg/m ³ STEL: 100 ppm STEL: 540 mg/m ³	STEL: 100 ppm STEL: 540 mg/m ³ TWA: 50 ppm TWA: 270 mg/m ³	-
DIMETHYL SULFIDE 75-18-3	-	-	-	VLA-ED: 10 ppm	-
ISOBUTYL ACETATE 110-19-0	-	STEL: 187 ppm STEL: 903 mg/m ³ TWA: 150 ppm TWA: 724 mg/m ³	TWA: 150 ppm TWA: 710 mg/m ³ STEL: 200 ppm STEL: 940 mg/m ³	TWA: 150 ppm TWA: 724 mg/m ³	-
ACETOPHENONE 98-86-2	-	-	-	TWA: 10 ppm TWA: 50 mg/m ³	-
ISOAMYL ALCOHOL 123-51-3	-	STEL: 125 ppm STEL: 458 mg/m ³ TWA: 100 ppm TWA: 366 mg/m ³	TWA: 100 ppm TWA: 360 mg/m ³	STEL: 125 ppm STEL: 458 mg/m ³ TWA: 100 ppm TWA: 366 mg/m ³	-
BENZYL ACETATE 140-11-4	-	-	-	TWA: 10 ppm TWA: 62 mg/m ³	-
PINENES 80-56-8	-	-	-	VLA-ED: 20 ppm VLA-ED: 113 mg/m ³	-
BENZONITRILE 100-47-0	-	TWA: 5 mg/m ³ Skin	VME: 5 mg/m ³	-	-
Chemical Name	Italy	Portugal	The Netherlands	Finland	Denmark
ETHYL ALCOHOL 64-17-5	-	TWA: 1000 ppm	Skin STEL: 1900 mg/m ³ TWA: 260 mg/m ³	TWA: 1000 ppm TWA: 1900 mg/m ³ STEL: 1300 ppm STEL: 2500 mg/m ³	TWA: 1000 ppm TWA: 1900 mg/m ³
BENZYL ALCOHOL 100-51-6	-	-	-	TWA: 10 ppm TWA: 45 mg/m ³	-
ETHYL ACETATE 141-78-6	-	TWA: 400 ppm	-	TWA: 300 ppm TWA: 1100 mg/m ³ STEL: 500 ppm STEL: 1800 mg/m ³	TWA: 150 ppm TWA: 540 mg/m ³
BENZALDEHYDE 100-52-7	-	-	-	TWA: 1 ppm TWA: 4.4 mg/m ³ STEL: 4 ppm STEL: 17.4 mg/m ³ Ceiling: 4 ppm Ceiling: 17.4 mg/m ³	-
ISOAMYL ACETATE 123-92-2	TWA: 50 ppm TWA: 270 mg/m ³ STEL: 100 ppm STEL: 540 mg/m ³	STEL: 100 ppm STEL: 540 mg/m ³ TWA: 50 ppm	STEL: 530 mg/m ³	TWA: 50 ppm TWA: 270 mg/m ³ STEL: 100 ppm STEL: 540 mg/m ³	TWA: 50 ppm TWA: 271 mg/m ³

DIMETHYL SULFIDE 75-18-3	-	TWA: 10 ppm	-	-	-
ISOBUTYL ACETATE 110-19-0	-	TWA: 150 ppm	-	TWA: 150 ppm TWA: 720 mg/m ³ STEL: 200 ppm STEL: 960 mg/m ³	TWA: 150 ppm TWA: 710 mg/m ³
ACETOPHENONE 98-86-2	-	TWA: 10 ppm	-	TWA: 5 ppm TWA: 25 mg/m ³	TWA: 10 ppm TWA: 49 mg/m ³
ISOAMYL ALCOHOL 123-51-3	-	STEL: 125 ppm TWA: 100 ppm	-	TWA: 100 ppm TWA: 370 mg/m ³ STEL: 150 ppm STEL: 550 mg/m ³	TWA: 100 ppm TWA: 360 mg/m ³
BENZYL ACETATE 140-11-4	-	TWA: 10 ppm	-	-	TWA: 10 ppm TWA: 61 mg/m ³
Hexenal (Aldehyde C-6) 66-25-1	-	-	-	STEL: 10 ppm STEL: 42 mg/m ³	-
LIMONENE 5989-27-5	-	-	-	TWA: 25 ppm TWA: 140 mg/m ³ STEL: 50 ppm STEL: 280 mg/m ³	-
PINENES 80-56-8	-	TWA: 20 ppm	-	-	-
P-CYMELE 99-87-6	-	-	-	-	TWA: 25 ppm TWA: 135 mg/m ³
BENZONITRILE 100-47-0	-	-	Skin STEL: 10 mg/m ³ TWA: 1 mg/m ³	TWA: 5 mg/m ³ STEL: 10 mg/m ³ Skin	-
Chemical Name	Austria	Switzerland	Poland	Norway	Ireland
PROPYLENE GLYCOL 57-55-6	-	-	-	TWA: 25 ppm TWA: 79 mg/m ³ STEL: 37.5 ppm STEL: 118.5 mg/m ³	TWA: 150 ppm TWA: 470 mg/m ³ TWA: 10 mg/m ³
ETHYL ALCOHOL 64-17-5	STEL 2000 ppm STEL 3800 mg/m ³ MAK: 1000 ppm MAK: 1900 mg/m ³	STEL: 1000 ppm STEL: 1920 mg/m ³ MAK: 500 ppm MAK: 960 mg/m ³	NDS: 1900 mg/m ³	TWA: 500 ppm TWA: 950 mg/m ³ STEL: 625 ppm STEL: 1187.5 mg/m ³	TWA: 1000 ppm TWA: 1900 mg/m ³
BENZYL ALCOHOL 100-51-6	-	-	NDS: 240 mg/m ³	-	-
ETHYL ACETATE 141-78-6	STEL 600 ppm STEL 2100 mg/m ³ TWA: 300 ppm TWA: 1050 mg/m ³	STEL: 800 ppm STEL: 2800 mg/m ³ TWA: 400 ppm TWA: 1400 mg/m ³	STEL: 600 mg/m ³ TWA: 200 mg/m ³	TWA: 150 ppm TWA: 550 mg/m ³ STEL: 187.5 ppm STEL: 687.5 mg/m ³	TWA: 200 ppm STEL: 400 ppm
BENZALDEHYDE 100-52-7	-	-	STEL: 40 mg/m ³ TWA: 10 mg/m ³	-	-
ISOAMYL ACETATE 123-92-2	STEL 100 ppm STEL 540 mg/m ³ TWA: 50 ppm TWA: 270 mg/m ³	TWA: 50 ppm TWA: 260 mg/m ³	STEL: 500 mg/m ³ TWA: 250 mg/m ³	TWA: 50 ppm TWA: 260 mg/m ³ STEL: 75 ppm STEL: 325 mg/m ³	TWA: 50 ppm TWA: 260 mg/m ³ STEL: 100 ppm STEL: 520 mg/m ³
DIMETHYL SULFIDE 75-18-3	-	-	-	-	TWA: 20 ppm
ISOBUTYL ACETATE 110-19-0	STEL 100 ppm STEL 480 mg/m ³ TWA: 100 ppm TWA: 480 mg/m ³ Ceiling 100 ppm Ceiling 480 mg/m ³	STEL: 200 ppm STEL: 960 mg/m ³ TWA: 100 ppm TWA: 480 mg/m ³	STEL: 400 mg/m ³ TWA: 200 mg/m ³	-	TWA: 150 ppm TWA: 700 mg/m ³ STEL: 187 ppm STEL: 875 mg/m ³
ACETOPHENONE 98-86-2	-	-	STEL: 100 mg/m ³ TWA: 50 mg/m ³	-	TWA: 10 ppm TWA: 49 mg/m ³
ISOAMYL ALCOHOL 123-51-3	STEL 200 ppm STEL 720 mg/m ³ TWA: 100 ppm TWA: 360 mg/m ³	STEL: 80 ppm STEL: 292 mg/m ³ TWA: 20 ppm TWA: 73 mg/m ³	STEL: 400 mg/m ³ TWA: 200 mg/m ³	TWA: 50 ppm TWA: 180 mg/m ³ STEL: 75 ppm STEL: 225 mg/m ³	TWA: 100 ppm TWA: 360 mg/m ³ STEL: 125 ppm STEL: 450 mg/m ³
Hexenal (Aldehyde C-6) 66-25-1	-	-	NDSch: 80 mg/m ³ NDS: 40 mg/m ³	-	-
LIMONENE 5989-27-5	-	STEL: 40 ppm STEL: 220 mg/m ³ MAK: 20 ppm MAK:	-	TWA: 25 ppm TWA: 140 mg/m ³ STEL: 37.5 ppm	-

		110 mg/m ³		STEL: 175 mg/m ³	
PINENES 80-56-8	-	-	-	TWA: 25 ppm TWA: 140 mg/m ³ Skin STEL: 37.5 ppm STEL: 175 mg/m ³	-
BENZONITRILE 100-47-0	-	-	-	TWA: 5 mg/m ³ Skin STEL: 10 mg/m ³	TWA: 5 mg/m ³ 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/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 clear
Odor raspberry fruity Floral
Color yellow to light amber

Property

Values

• Method

pH		No information available
Melting/freezing point		No information available
Boiling point/boiling range		FCC Method
Flash Point	30 °C / 86 °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	0.9598 - 0.9898	FCC Method
Specific Gravity @ 20C	0.9628 - 0.9928	FCC Method
Refractive Index	1.3757 - 1.4057	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
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

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.

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.

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

ATEmix (oral)	12,823.00 mg/kg
ATEmix (dermal)	21,634.00 mg/kg
ATEmix (inhalation-dust/mist)	3.72 mg/l

Unknown Acute Toxicity

98.30630129% of the mixture consists of ingredient(s) of unknown toxicity.
35.39606129 % of the mixture consists of ingredient(s) of unknown acute oral toxicity.
56.04755129 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity.
98.30630129 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas).
98.30630129 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapor).

77.65481129 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist).

Oral LD50

Chemical Name	Oral LD50	Dermal LD50	LC50 Inhalation
PROPYLENE GLYCOL	20000 mg/kg (Rat)	20800 mg/kg (Rabbit)	
ETHYL ALCOHOL	7060 mg/kg (Rat)		124.7 mg/L (Rat) 4 h

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.
Reproductive toxicity	No information available.
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.

Section 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Ecotoxicity Toxic to aquatic life

35.3262% 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
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 10800: 24 h Daphnia magna mg/L EC50 2: 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
ETHYL ACETATE	3300: 48 h Desmodesmus subspicatus mg/L EC50	220 - 250: 96 h Pimephales promelas mg/L LC50 flow-through 484: 96 h Oncorhynchus mykiss mg/L LC50 flow-through 352 - 500: 96 h Oncorhynchus mykiss mg/L	560: 48 h Daphnia magna mg/L EC50 Static

		LC50 semi-static	
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 macrochirus mg/L LC50 static	50: 24 h Daphnia magna mg/L EC50
DIMETHYL SULFIDE	-	-	23: 48 h Daphnia pulex mg/L EC50
ISOBUTYL ACETATE	-	101: 48 h Leuciscus idus melanotus mg/L LC50 static 101 - 123: 48 h Leuciscus idus melanotus mg/L LC50 flow-through	168: 24 h Daphnia magna mg/L EC50
ACETOPHENONE	-	162: 96 h Pimephales promelas mg/L LC50 flow-through 155: 96 h Pimephales promelas mg/L LC50 static	-
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
Hexenal (Aldehyde C-6)	-	12-16.5: 96 h Pimephales promelas mg/L LC50 flow-through	-
LIMONENE	-	0.619-0.796: 96 h Pimephales promelas mg/L LC50 flow-through 35: 96 h Oncorhynchus mykiss mg/L LC50	-
PINENES	-	0.28: 96 h Pimephales promelas mg/L LC50 static	41: 48 h Daphnia magna mg/L LC50
BENZONITRILE	231: 6 h Chlorella vulgaris mg/L EC50	130: 96 h Brachydanio rerio mg/L LC50 400: 96 h Poecilia reticulata mg/L LC50 static 64: 96 h Pimephales promelas mg/L LC50 78: 96 h Lepomis macrochirus mg/L LC50 static 78: 96 h Pimephales promelas mg/L LC50 static	122: 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
BENZYL ALCOHOL	1.1
ETHYL ACETATE	0.6
BENZALDEHYDE	1.48
ISOBUTYL ACETATE	1.72
ACETOPHENONE	1.73
ISOAMYL ALCOHOL	1.28
HEXYL ALCOHOL	2.03
BENZYL ACETATE	1.96
PINENES	4.1
P-CYME	4.1
BENZONITRILE	1.5

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	1197
14.2 Proper shipping name	EXTRACTS, FLAVOURING, LIQUID
14.3 Hazard class	3
14.4 Packing Group	III

DOT/ADR/RID

14.1 UN/ID No	1197
14.2 Proper shipping name	EXTRACTS, FLAVOURING, LIQUID
14.3 Hazard class	3
14.4 Packing Group	III

ICAO/IATA

14.1 UN/ID No	1197
14.2 Proper shipping name	EXTRACTS, FLAVOURING, LIQUID
14.3 Hazard class	3
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

TSCA	-
DSL/NDL	-
EINECS/ELINCS	-
ENCS	-
IECSC	-
KECL	-
PICCS	-
AICS	-

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDL - 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

Full text of H-Statements referred to under section 3

H302 - Harmful if swallowed
H312 - Harmful in contact with skin
H333 - May be harmful if inhaled
H401 - Toxic to aquatic life
H319 - Causes serious eye irritation
H227 - Combustible liquid
H332 - Harmful if inhaled
H316 - Causes mild skin irritation
H402 - Harmful to aquatic life
H225 - Highly flammable liquid and vapor
H226 - Flammable liquid and vapor
H303 - May be harmful if swallowed
H336 - May cause drowsiness or dizziness
H400 - Very toxic to aquatic life
H317 - May cause an allergic skin reaction
H315 - Causes 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
H411 - Toxic to aquatic life with long lasting effects
EUH066 - Repeated exposure may cause skin dryness or cracking

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 25-Nov-2025

Reason for revision: Not applicable.

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

WARNING/DISCLAIMER:

Our ingredients have not been tested, nor have they been determined safe, for inhalation or use in any electronic smoking devices, electronic nicotine delivery systems, electronic cigarettes, or other similar devices (collectively "E-Cigarettes") or in any E-Liquids used with E-Cigarettes. By receiving Apex Flavors, Inc ingredients, the recipient confirms that they will not use these ingredients in connection with the manufacture and distribution of E-Cigarettes, E-Liquids or any component thereof. WE DISCLAIM, TO THE FULLEST EXTENT PERMITTED BY LAW, ALL WARRANTIES, EXPRESS OR IMPLIED, and disclaim all liability in connection with the use of our ingredients in connection with E-Cigarettes and E-Liquids. All such risks are assumed by you and the user.

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.