

SAFETY DATA SHEET

Issuing Date: 15-Oct-2018

Revision Date: 15-Oct-2018

Version 3

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier

Product name

UB-7564 NAT PEACH WONF FL WS

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

Recommended use

No information available

Uses advised against

No information available

1.3. Details of the supplier of the safety data sheet Details Of The Supplier Of The Safety Data Sheet

Ungerer and Company 4 Ungerer Way Lincoln Park, NJ 07035-1491 1-973-628-0600

For further information, please contact: Michael Licciardello

E-mail address

mlicciardello@UngererAndCompany.com

1.4 Emergency Telephone Number

CHEMTREC: 1-800-424-9300 For US/ 703-527-3887 Outside US / CN#23087

2. HAZARDS IDENTIFICATION

Classification

OSHA Regulatory Status

This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.122)

Not a dangerous substance or mixture according to the Globally Harmonized System (GHS)

GHS Label elements, including precautionary statements

The product contains no substances which at their given concentration, are considered to be hazardous to health

Appearance Clear Yellow - Brown Yellow

Physical State @20°C Liquid

Odor Characteristic

Hazards not otherwise classified (HNOC)

Other information

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.2 Mixtures

Chemical name	CAS No.	Weight-%	Classification according to Regulation (EC) No. 1272/2008 [CLP]	FEMA Numbers
Acetaldehyde	75-07-0	< 0.1%		2003
1				<u>,l</u>

ı	1 1 1	Carc. 2 (H351)	i i
ŀ		Eye Irrit. 2A (H319)	ľ
		Flam. Liq. 1 (H224)	
		STOT SE 3 (H335)	1
1		Acute Tox. 4 (H302)	1
ľ		Acute Tox. 5 (H313)	
1		Aquatic Acute 3 (H402)	

Regulatory Information

Exact Chemical Percentage and Non-hazardous components are withheld as a Trade Secret under

OSHA §1910.1200(j)

4. FIRST AID MEASURES

First aid measures for different exposure routes

Eye contact

Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids.

Consult a physician.

Skin contact

Wash skin with soap and water.

Inhalation

Move to fresh air.

Ingestion

Clean mouth with water and afterwards drink plenty of water.

Most important symptoms/effects, acute and delayed

Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician

Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Unsuitable Extinguishing Media Do not use a solid water stream as it may scatter and spread fire.

Specific hazards arising from the chemical

No information available.

Explosion Data

Sensitivity to Mechanical Impact none.

Sensitivity to Static Discharge none.

Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions

Ensure adequate ventilation.

Environmental precautions

Environmental precautions

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

Methods and materials for containment and cleaning up

Methods for Containment

Prevent further leakage or spillage if safe to do so.

Methods for cleaning up

Use personal protective equipment. Dam up. Cover liquid spill with sand, earth or other noncombustible absorbent material. Take up mechanically and collect in suitable container

for disposal. Clean contaminated surface thoroughly.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling

Handle in accordance with good industrial hygiene and safety practice.

Conditions for safe storage, including any incompatibilities

Technical measures/Storage

conditions

Keep containers tightly closed in a dry, cool and well-ventilated place.

Incompatible products

None known based on information supplied.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines

Chemical name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Glycerin 56-81-5		TWA: 15 mg/m³ mist, total particulate TWA: 5 mg/m³ mist, respirable fraction (vacated) TWA: 10 mg/m³ mist, total particulate	
3-Methylbutyl acetate 123-92-2	STEL: 100 ppm TWA: 50 ppm	(vacated) TWA: 5 mg/m³ mist, respirable fraction TWA: 100 ppm TWA: 525 mg/m³ (vacated) TWA: 100 ppm (vacated) TWA: 525 mg/m³	IDLH: 1000 ppm TWA: 100 ppm TWA: 525 mg/m ³
Ethyl alcohol 64-17-5	STEL: 1000 ppm	TWA: 1000 ppm TWA: 1900 mg/m ³ (vacated) TWA: 1000 ppm (vacated) TWA: 1900 mg/m ³	IDLH: 3300 ppm TWA: 1000 ppm TWA: 1900 mg/m ³
Ethyl acetate 141-78-6	TWA: 400 ppm	TWA: 400 ppm TWA: 1400 mg/m ³ (vacated) TWA: 400 ppm (vacated) TWA: 1400 mg/m ³	IDLH: 2000 ppm TWA: 400 ppm TWA: 1400 mg/m ³
Isobutyl acetate 110-19-0	TWA: 150 ppm	TWA: 150 ppm TWA: 700 mg/m ³ (vacated) TWA: 150 ppm (vacated) TWA: 700 mg/m ³	IDLH: 1300 ppm TWA: 150 ppm TWA: 700 mg/m ³
3-Methylbutan-1-ol 123-51-3	STEL: 125 ppm TWA: 100 ppm	TWA: 100 ppm TWA: 360 mg/m³ (vacated) TWA: 100 ppm (vacated) TWA: 360 mg/m³ (vacated) STEL: 125 ppm (vacated) STEL: 450 mg/m³	IDLH: 500 ppm TWA: 100 ppm TWA: 360 mg/m ³ STEL: 125 ppm STEL: 450 mg/m ³
Acetic acid 64-19-7	STEL: 15 ppm TWA: 10 ppm	TWA: 10 ppm TWA: 25 mg/m³ (vacated) TWA: 10 ppm (vacated) TWA: 25 mg/m³	IDLH: 50 ppm TWA: 10 ppm TWA: 25 mg/m ³ STEL: 15 ppm STEL: 37 mg/m ³
Acetaldehyde 75-07-0	Ceiling: 25 ppm	TWA: 200 ppm TWA: 360 mg/m³ (vacated) TWA: 100 ppm (vacated) TWA: 180 mg/m³ (vacated) STEL: 150 ppm (vacated) STEL: 270 mg/m³	IDLH: 2000 ppm
Furfural 98-01-1	TWA: 0.2 ppm S*	TWA: 5 ppm TWA: 20 mg/m³ (vacated) TWA: 2 ppm (vacated) TWA: 8 mg/m³ (vacated) S* S*	IDLH: 100 ppm

NIOSH IDLH: Immediately Dangerous to Life or Health

Other Exposure Guidelines

Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992).

Exposure controls

Showers

Engineering Measures

Eyewash stations Ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/Face Protection

Tightly fitting safety goggles.

Skin and body protection

Chemical resistant apron.

Respiratory protection

If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be

provided in accordance with current local regulations.

Hygiene measures

Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information On Basic Physical And Chemical Properties

Physical State @20°C

Liquid

Appearance Odor

Clear Yellow - Brown Yellow

Characteristic

Odor Threshold

No information available No information available

pΗ Melting point/range Freezing Point

No information available No information available No information available

Initial Boiling Point Boiling point/boiling range

410 °F / 210 °C 219 °F / 104 °C

Flash point Evaporation Rate VALUE (BuOAc=1) No information available

(Literature)

No information available No information available

Explosive properties Oxidizing Properties

No information available No information available

Vapor Pressure @20°C (mmHg) Vapor Density

Flammability Limits in Air

No information available 1.0770

Specific Gravity

Slightly soluble

Water Solubility

No information available

solubility Partition coefficient: Autoignition temperature

No information available No information available No information available

Decomposition Temperature °C Viscosity, dynamic Molecular Weight

No information available No information available No information available

10. STABILITY AND REACTIVITY

Reactivity

VOC Content

Exothermic reaction

Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions

None under normal processing.

Conditions to avoid

Extremes of temperature and direct sunlight.

Incompatible materials

None known based on information supplied.

Hazardous decomposition products

None known based on information supplied.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

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

Component Information

Toxicology data for the components

Chemical name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Acetaldehyde 75-07-0	1930 mg/kg (Rat)		13300 ppm(Rat)4 h

Information on toxicological effects

Symptoms

No information available.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Sensitization

No information available.

mutagenic effects

No information available.

Carcinogenicity

The table below indicates whether each agency has listed any ingredient as a carcinogen.

Chemical name	ACGIH	IARC	NTP	OSHA
Acetaldehyde		C 0D	Daniel A. D. Said J.	
75-07-0	-	Group 2B	Reasonably Anticipated	-

IARC: (International Agency for Research on Cancer)

Group 2B - Possibly Carcinogenic to Humans

NTP: (National Toxicity Program)

Reasonably Anticipated - Reasonably Anticipated to be a Human Carcinogen

Reproductive Toxicity

No information available.

STOT - single exposure STOT - repeated exposure

No information available. No information available.

Target Organ Effects

Eyes, Respiratory system, Kidney, Skin.

Aspiration hazard

No information available.

Numerical measures of toxicity - Product Information

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

ATEmix (oral)

17939 mg/kg

ATEmix (dermal)

17141 mg/kg

ATEmix (inhalation-dust/mist) 189.2 mg/l

12. ECOLOGICAL INFORMATION

Ecotoxicity

79.7866% 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 othe aquatic invertebrates
1,2-Propylene glycol 57-55-6	EC50: 19000 mg/L 96h (Pseudokirchneriella subcapitata)	LC50: 51600 mg/L 96h static (Oncorhynchus mykiss) LC50: 41 - 47 mL/L 96h static (Oncorhynchus mykiss) LC50: 51400 mg/L 96h static (Pimephales promelas) LC50: 710 mg/L 96h (Pimephales promelas)	EC50: 1000 mg/L 48h Static (Daphnia magna) EC50: 10000 mg/L 24h (Daphnia magna)
Glycerin 56-81-5	-	LC50: 51 - 57 mL/L 96h static (Oncorhynchus mykiss)	EC50: 500 mg/L 24h (Daphnia magna)
Linalool 78-70-6	EC50: 88.3 mg/L 96h (Desmodesmus subspicatus)	LC50: 22 - 46 mg/L 96h static (Leuciscus idus)	EC50: 20 mg/L 48h (Daphnia magna)
5-Hexyldihydrofuran-2 (3H)-one 706-14-9	-	LC50: 17.1 - 19 mg/L 96h flow-through (Pimephales promelas)	-
			The state of the s

Vanillin 121-33-5		LC50: 57 mg/L 96h semi-static (Pimephales promelas) LC50: 88 mg/L 96h static (Pimephales promelas) LC50: 53 - 61.3 mg/L 96h flow-through (Pimephales promelas)	EC50: 180 mg/L 24h (Daphnia magna)
Ethyl alcohol 64-17-5		LC50: 12.0 - 16.0 mL/L 96h static (Oncorhynchus mykiss) LC50: 13400 - 15100 mg/L 96h flow-through (Pimephales promelas) LC50: 100 mg/L 96h static (Pimephales promelas)	LC50: 9268 - 14221 mg/L 48h (Daphnia magna) EC50: 10800 mg/L 24h (Daphnia magna) EC50: 2 mg/L 48h Static (Daphnia magna)
Ethyl acetate 141-78-6	EC50: 3300 mg/L 48h (Desmodesmus subspicatus)	LC50: 220 - 250 mg/L 96h flow-through (Pimephales promelas) LC50: 352 - 500 mg/L 96h semi-static (Oncorhynchus mykiss) LC50: 484 mg/L 96h flow-through (Oncorhynchus mykiss)	EC50: 560 mg/L 48h Static (Daphnia magna)
Isobutyl acetate 110-19-0	-	LC50: 101 mg/L 48h static (Leuciscus idus melanotus) LC50: 101 - 123 mg/L 48h flow-through (Leuciscus idus melanotus)	EC50: 168 mg/L 24h (Daphnia magna)
3-Methylbutan-1-ol 123-51-3	EC50: 493 mg/L 72h (Desmodesmus subspicatus) EC50: 181 mg/L 96h (Desmodesmus subspicatus)	LC50: 700 mg/L 96h static (Salmo gairdneri)	EC50: 260 mg/L 48h (Daphnia magna)
Ethyl hexanoate 123-66-0	-	LC50: 8.02 - 9.97 mg/L 96h flow-through (Pimephales promelas)	#.
Hexan-1-ol 111-27-3	-	LC50: 144 mg/L 96h static (Brachydanio rerio) LC50: 89.7 - 106 mg/L 96h flow-through (Pimephales promelas)	EC50: 201 mg/L 24h (Daphnia magna)
Benzaldehyde 100-52-7	-	LC50: 10.6 - 11.8 mg/L 96h flow-through (Oncorhynchus mykiss) LC50: 12.69 mg/L 96h static (Oncorhynchus mykiss) LC50: 7.5 mg/L 96h static (Lepomis macrochirus) LC50: 6.8 - 8.53 mg/L 96h flow-through (Pimephales promelas) LC50: 0.8 - 1.44 mg/L 96h flow-through (Lepomis macrochirus)	EC50: 50 mg/L 24h (Daphnia magna)
Acetic acid 64-19-7	-	LC50: 75 mg/L 96h static (Lepomis macrochirus) LC50: 79 mg/L 96h static (Pimephales promelas)	EC50: 65 mg/L 48h Static (Daphnia magna) EC50: 47 mg/L 24h (Daphnia magna)
Acetaldehyde 75-07-0	EC50: 237 - 249 mg/L 120h (Nitzschia linearis)	LC50: 28.0 - 34.0 mg/L 96h flow-through (Pimephales promelas) LC50: 39.8 - 46.8 mg/L 96h static (Pimephales promelas) LC50: 53 mg/L 96h static (Lepomis macrochirus) LC50: 1.8 - 2.4 mg/L 96h static (Oncorhynchus mykiss)	EC50: 48.3 mg/L 48h (Daphnia magna) EC50: 3.64 - 6.15 mg/L 48h Static (Daphnia magna)
3-Hexen-1-ol, (Z)- 928-96-1	-	LC50: 352 - 412 mg/L 96h flow-through (Pimephales promelas)	-
Hexanal 66-25-1	+	LC50: 12 - 16.5 mg/L 96h flow-through (Pimephales promelas)	=
Furfural 98-01-1	-	LC50: 16.79 - 26.35 mg/L 96h flow-through (Pimephales promelas) LC50: 13.4 - 19.3 mg/L 96h static (Pimephales promelas)	EC50: 29 mg/L 24h (Daphnia magna)

Persistence and degradability

No information available.

Bioaccumulation

No information available.

Chemical name	log Pow
Acetaldehyde	0.5
75-07-0	

Other adverse effects

No information available

13. DISPOSAL CONSIDERATIONS

Waste treatment

Waste Disposal Methods

It must undergo special treatment, e.g. at suitable disposal site, to comply with local

regulations.

Contaminated packaging

Do not re-use empty containers.

US EPA Waste Number

U001 U112 U125

This product contains one or more substances that are listed with the State of California as a hazardous waste.

	California Hazardous Waste Status
Chemical name	

Acetaldehyde 75-07-0

Toxic Ignitable

14. TRANSPORT INFORMATION

DOT

BULK PACKAGING

Not regulated.

Reportable Quantity (RQ)

Please Refer to Appendix A to 49CFR 172.101 - List of Hazardous Substances and

Reportable Quantities

DOT

NON BULK PACKAGING

Not regulated

Reportable Quantity (RQ)

Please Refer to Appendix A to 49CFR 172.101 - List of Hazardous Substances and

Reportable Quantities

IMDG/IMO

Not regulated

Reportable Quantity (RQ)

Please Refer to Appendix A to 49CFR 172.101 - List of Hazardous Substances and

Reportable Quantities

MEX (SCT)

Not regulated

Reportable Quantity (RQ)

Please Refer to Appendix A to 49CFR 172.101 - List of Hazardous Substances and

Reportable Quantities

ICAO/IATA

Not regulated

Reportable Quantity (RQ)

Please Refer to Appendix A to 49CFR 172.101 - List of Hazardous Substances and

Reportable Quantities

TDG

Not regulated

Reportable Quantity (RQ)

Please Refer to Appendix A to 49CFR 172.101 - List of Hazardous Substances and

Reportable Quantities

15. REGULATORY INFORMATION

International Inventories

TSCA

DSL/NDSL

Not determined

EINECS/ELINCS ENCS

Not determined

IECSC

Not determined Not determined

KECL PICCS AICS

Not determined Not determined

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 Commercial Chemical Substances/EU 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

U.S. Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

SARA 311/312 Hazard Categories

Acute Health Hazard no **Chronic Health Hazard** no Fire Hazard no Sudden Release of Pressure Hazard no **Reactive Hazard** no

Clean Water Act

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42):

Chemical name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Acetaldehyde 75-07-0	1000 lb	-	÷	X

CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302):

Ī	Chemical name	Hazardous Substances RQs	Extremely Hazardous Substances RQs	RQ
ľ	Acetaldehyde 75-07-0	1000 lb	÷ .	RQ 1000 lb final RQ RQ 454 kg final RQ

U.S. State Regulations

California Proposition 65

This product contains the following Proposition 65 chemicals:

Chemical name	California Prop. 65	
Acetaldehyde	Carcinogen	4
75-07-0	Carcinogen	

U.S. State Right-to-Know Regulations

Chemical name	New Jersey	Massachusetts	Pennsylvania
1,2-Propylene glycol 57-55-6	Х	:-	X
Glycerin 56-81-5	X	×	X
3-Methylbutyl acetate 123-92-2	X	X	X
Ethyl alcohol 64-17-5	X	X	×
Ethyl acetate 141-78-6	X	X	X
Ethyl butyrate 105-54-4	X	X Carrier .	X
Isobutyl acetate 110-19-0	X	X	×
Acetic acid 64-19-7	X	X	X
Acetaldehyde 75-07-0	X	X	X
Ethyl propionate 105-37-3	X	X	X

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

16.	OTH	IER	INFO	RMAT	ΓΙΟN

NFPA

Health Hazard 0

Flammability 1

Instability 0

Physical and chemical hazards -

HMIS

Health Hazard 0

Flammability 1

Physical Hazard 0

Personal protection X

Revision Date: Revision Note

15-Oct-2018

No information available

Disclaimer

The information provided in this Safety Data Sheet 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 guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered 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 materials or in any process, unless specified in the text.

This material has not been evaluated for safe use in e-cigarettes, therefore Ungerer & Company's position is that it is not intended to be used in this particular application

End of Safety Data Sheet



SAFETY DATA SHEET

Issuing Date: 28-Nov-2018

Revision Date: 28-Nov-2018

Version 5

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier

Product name

UB-7565 NAT HONEY WONF FL WS

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

Recommended use

No information available

Uses advised against

No information available

1.3. Details of the supplier of the safety data sheet Details Of The Supplier Of The Safety Data Sheet

Ungerer and Company 4 Ungerer Way Lincoln Park, NJ 07035-1491 1-973-628-0600

For further information, please contact: Michael Licciardello

E-mail address

mlicciardello@UngererAndCompany.com

1.4 Emergency Telephone Number

CHEMTREC: 1-800-424-9300 For US/ 703-527-3887 Outside US / CN#23087

2. HAZARDS IDENTIFICATION

Classification

OSHA Regulatory Status

This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.122)

Not a dangerous substance or mixture according to the Globally Harmonized System (GHS)

GHS Label elements, including precautionary statements

The product contains no substances which at their given concentration, are considered to be hazardous to health

Appearance Clear Colorless - Light

Yellow

Physical State @20°C Liquid

Odor Characteristic

Hazards not otherwise classified (HNOC)

Other information

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.2 Mixtures

Chemical name	CAS No.	Weight-%	Classification according to Regulation (EC) No. 1272/2008 [CLP]	FEMA Numbers
Benzyl alcohol	100-51-6	1-<5%	Acute Tox. 5 (H313) Acute Tox. 4 (H302) Acute Tox. 4(H332) Eye Irrit. 2A (H319)	2137
Myrcene	123-35-3	< 0.1%	Flam. Liq. 3 (H226) Asp. Tox. 1 (H304) Skin Irrit. 2 (H315) Eye Irrit. 24 (H319) Aquatic Acute 1 (H400) Aquatic Chronic 2 (H411)	2762

Regulatory Information

Exact Chemical Percentage and Non-hazardous components are withheld as a Trade Secret under OSHA §1910.1200(j)

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4. FIRST AID MEASURES

First aid measures for different exposure routes

General advice

If symptoms persist, call a physician.

Eve contact

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.

Skin contact

Immediate medical attention is not required. Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. If skin irritation persists, call a

physician.

Inhalation

Immediate medical attention is not required. If symptoms persist, call a physician. Move to

fresh air in case of accidental inhalation of vapors or decomposition products.

Ingestion

Clean mouth with water and afterwards drink plenty of water. Never give anything by mouth

to an unconscious person. Consult a physician. Do not induce vomiting.

Protection of first-aiders

Use personal protective equipment.

Most important symptoms/effects, acute and delayed

Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician

Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

Use:. Dry chemical. Carbon dioxide (CO₂). Water spray. Alcohol-resistant foam.

Flammable Properties

Combustible liquid

Unsuitable Extinguishing Media Do not use a solid water stream as it may scatter and spread fire.

Specific hazards arising from the chemical

Keep product and empty container away from heat and sources of ignition. Risk of ignition.

Explosion Data

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

Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions

Use personal protective equipment. Remove all sources of ignition. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak. Pay attention to

flashback. Take precautionary measures against static discharges.

Environmental precautions

Environmental precautions

Beware of vapors accumulating to form explosive concentrations. Vapors can accumulate in low areas. Do not flush into surface water or sanitary sewer system. Prevent further leakage or spillage if safe to do so. Prevent product from entering drains.

Methods and materials for containment and cleaning up

Methods for Containment

Prevent further leakage or spillage if safe to do so.

Methods for cleaning up

Use personal protective equipment. Dam up. Cover liquid spill with sand, earth or other noncombustible absorbent material. Take up mechanically and collect in suitable container for disposal. Clean contaminated surface thoroughly. Soak up with inert absorbent material. Pick up and transfer to properly labeled containers. Take precautionary measures against static discharges.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling

Use local exhaust ventilation. All equipment used when handling the product must be grounded. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Wear personal protective equipment/face protection. Do not breathe dust/fume/gas/mist/vapors/spray. Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapors).

Conditions for safe storage, including any incompatibilities

conditions

Technical measures/Storage Keep away from heat and sources of ignition. Keep containers tightly closed in a cool, wellventilated place. Keep away from heat. Keep in properly labeled containers.

Incompatible products

None known based on information supplied.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines

Chemical name		ACGIH TLV	OSHA PEL	NIOSH IDLH
Ethyl alcoho 64-17-5	bl	STEL: 1000 ppm	TWA: 1000 ppm TWA: 1900 mg/m ³ (vacated) TWA: 1000 ppm (vacated) TWA: 1900 mg/m ³	IDLH: 3300 ppm TWA: 1000 ppm TWA: 1900 mg/m ³
Beta Pinene 127-91-3	Э	TWA: 20 ppm		-
Alpha Pinen 80-56-8	е	TWA: 20 ppm	-	

NIOSH IDLH: Immediately Dangerous to Life or Health

Other Exposure Guidelines

Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992).

Exposure controls

Showers

Engineering Measures

Eyewash stations Ventilation systems.

Individual protection measures, such as personal protective equipment

Eve/Face Protection

Tightly fitting safety goggles.

Skin and body protection

Chemical resistant apron.

Respiratory protection

If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be

provided in accordance with current local regulations.

Hygiene measures

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

and clothing

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information On Basic Physical And Chemical Properties

Physical State @20°C

Liquid

Appearance

Clear Colorless - Light Yellow

Odor

pH

Characteristic

Odor Threshold

No information available No information available

Melting point/range **Freezing Point Initial Boiling Point** No information available No information available No information available

Boiling point/boiling range Flash point

410 °F / 210 °C 201 °F / 94 °C

Evaporation Rate VALUE (BuOAc=1) No information available

(Literature) Flammable Properties

Combustible liquid No information available No information available

Flammability Limits in Air **Explosive properties Oxidizing Properties** Vapor Pressure @20°C (mmHg)

No information available No information available No information available

Vapor Density

1.0360

Specific Gravity Water Solubility

Soluble in Water No information available

solubility Partition coefficient: Autoignition temperature **Decomposition Temperature °C**

No information available No information available No information available

Viscosity, dynamic Molecular Weight

No information available No information available

10. STABILITY AND REACTIVITY

Reactivity_

Exothermic reaction

Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions

None under normal processing.

Conditions to avoid

Heat, flames and sparks.

Incompatible materials

None known based on information supplied.

Hazardous decomposition products

None known based on information supplied.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

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

Component Information

Toxicology data for the components

Chemical name	LD50 Oral	LD50 Dermal	LC50 Inhalation	
Benzyl alcohol 100-51-6	1620 mg/kg	2500 mg/kg	8.8 mg/L	
Myrcene 123-35-3	5 g/kg	5 g/kg	<u>-</u>	

Information on toxicological effects

Symptoms

No information available.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Sensitization

No information available. No information available.

mutagenic effects Carcinogenicity

The table below indicates whether each agency has listed any ingredient as a carcinogen.

Chemical name	ACGIH	IARC	NTP	OSHA
Myrcene		n in		
123-35-3	.=	28	-	-

IARC: (International Agency for Research on Cancer)

Group 2B - Possibly Carcinogenic to Humans

Reproductive Toxicity

No information available.

STOT - single exposure

No information available.

STOT - repeated exposure

No information available.

Aspiration hazard

No information available.

Numerical measures of toxicity - Product Information

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

ATEmix (oral)

15670 mg/kg

ATEmix (dermal)

17674 mg/kg

ATEmix (inhalation-dust/mist)

60.7 mg/l

ATEmix (inhalation-vapor)

445 mg/l

12. ECOLOGICAL INFORMATION

Ecotoxicity

97.2959% of the mixture consists of components(s) of unknown hazards to the aquatic environment

Chemical name	Toxicity to algae	Toxicity to algae Toxicity to fish		
1,2-Propylene glycol 57-55-6	EC50: 19000 mg/L 96h (Pseudokirchneriella subcapitata)	LC50: 51600 mg/L 96h static (Oncorhynchus mykiss) LC50: 710 mg/L 96h (Pimephales promelas) LC50: 51400 mg/L 96h static (Pimephales promelas) LC50: 41 - 47 mL/L 96h static (Oncorhynchus mykiss)	EC50: 10000 mg/L 24h (Daphni magna) EC50: 1000 mg/L 48h Static (Daphnia magna)	
Benzyl alcohol 100-51-6 EC50: 35 mg/L		LC50: 460 mg/L LC50: 10 mg/L	EC50: 23 mg/L	
d-Limonene 5989-27-5	-	LC50: 35 mg/L 96h LC50: 0.619 - 0.796 mg/L	- -	
2-Phenylethanol 60-12-8	EC50: 490 mg/L 72h (Desmodesmus subspicatus)	LC50: 220 - 460 mg/L 96h static (Leuciscus idus)	EC50: 287.17 mg/L 48h (Daphnia magna)	
Ethyl alcohol 64-17-5	-	LC50: 12.0 - 16.0 mL/L 96h LC50: 13400 - 15100 mg/L 96h LC50: 100 mg/L	LC50: 9268 - 14221 mg/L 48h EC50: 10800 mg/L 24h EC50: 2 mg/L 48h	
Alpha Pinene 80-56-8		LC50: 0.28 mg/L	LC50: 41 mg/L	

Persistence and degradability

No information available.

Bioaccumulation

No information available.

Chemical name	log Pow
Benzyl alcohol	1 44
100-51-6	···

Other adverse effects

No information available

13. DISPOSAL CONSIDERATIONS

Waste treatment

Waste Disposal Methods

It must undergo special treatment, e.g. at suitable disposal site, to comply with local

regulations.

Contaminated packaging

Do not re-use empty containers.

This product contains one or more substances that are listed with the State of California as a hazardous waste.

14. TRANSPORT INFORMATION

DOT

BULK PACKAGING

Not regulated.

Reportable Quantity (RQ)

Please Refer to Appendix A to 49CFR 172.101 - List of Hazardous Substances and

Reportable Quantities

DOT

NON BULK PACKAGING

Not regulated

Reportable Quantity (RQ)

Please Refer to Appendix A to 49CFR 172.101 - List of Hazardous Substances and

Reportable Quantities

IMDG/IMO

Not regulated

Reportable Quantity (RQ)

Please Refer to Appendix A to 49CFR 172.101 - List of Hazardous Substances and

Reportable Quantities

MEX (SCT)

Not regulated

Reportable Quantity (RQ)

Please Refer to Appendix A to 49CFR 172.101 - List of Hazardous Substances and

Reportable Quantities

ICAO/IATA

Not regulated

Reportable Quantity (RQ)

Please Refer to Appendix A to 49CFR 172.101 - List of Hazardous Substances and

Reportable Quantities

TDG

Not regulated

Reportable Quantity (RQ)

Please Refer to Appendix A to 49CFR 172.101 - List of Hazardous Substances and

Reportable Quantities

15. REGULATORY INFORMATION

International Inventories

TSCA

DSL/NDSL

Complies

Complies

EINECS/ELINCS

-

ENCS IECSC Not determined Complies

KECL PICCS AICS

Complies Not determined

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 Commercial Chemical Substances/EU 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

U.S. Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

SARA 311/312 Hazard Categories

Acute Health Hazard	Yes
Chronic Health Hazard	no
Fire Hazard	no
Sudden Release of Pressure Hazard	no
Reactive Hazard	no

Clean Water Act

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

U.S. State Regulations

California Proposition 65

This product does not contain Directly Added chemicals found on the Proposition 65 list. Proposition 65 chemicals are Naturally Occurring from Essential Oils

U.S. State Right-to-Know Regulations

Chemical name	New Jersey	Massachusetts	Pennsylvania	
1,2-Propylene glycol 57-55-6	X	-	X	
Ethyl alcohol 64-17-5	X	Х	×	
Alpha Pinene 80-56-8	X	X	X	

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

16.	OT	HE	R	INF	OR	M	AT	ION

NFPA HMIS Health Hazard 0

Flammability 1

Instability 0

Physical and chemical

Health Hazard 0 Flammability 1 Physical Hazard 0

hazards -Personal protection X

Revision Date:

28-Nov-2018

Revision Note

No information available

<u>Disclaimer</u>

The information provided in this Safety Data Sheet 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 guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered 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 materials or in any process, unless specified in the text.

This material has not been evaluated for safe use in e-cigarettes, therefore Ungerer & Company's position is that it is not intended to be used in this particular application

End of Safety Data Sheet