Version Revision Date: MSDS Number: Date of last issue: -

1.0 10-24-2016 100000003297 Date of first issue: 10-24-2016

SECTION 1. IDENTIFICATION

Product name : SCOTT® Continuous Air Freshener Refill - Mango

Product code : 12373

Manufacturer or supplier's details

Company name of supplier : Kimberly-Clark Corporation

Address : 1400 Holcomb Bridge Road,

Roswell, GA 30076-2199

Telephone : 1-888-346-6452

Emergency telephone : 1-877-561-6587

SECTION 2. HAZARDS IDENTIFICATION

GHS Classification

Flammable liquids : Category 4

Skin irritation : Category 2

Eye irritation : Category 2A

Skin sensitization : Category 1

Reproductive toxicity : Category 1

GHS label elements

Hazard pictograms





Signal Word : Warning

Hazard Statements : H227 Combustible liquid.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H319 Causes serious eye irritation.

H361 Suspected of damaging fertility or the unborn child.

Precautionary Statements : Prevention:

P201 + P202 Obtain special instructions before use. Do not

handle until all safety precautions have been read and under-

stood.

P280 Wear protective gloves.

Response:

P302 + P352 IF ON SKIN: Wash with plenty of soap and water. P305 + P351 + P338 IF IN EYES: Rinse cautiously with water

Version Revision Date: MSDS Number: Date of last issue: -

1.0 10-24-2016 100000003297 Date of first issue: 10-24-2016

for several minutes. Remove contact lenses, if present and easy

to do. Continue rinsing.

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

attention.

P333 + P313 If skin irritation or rash occurs: Get medical advice/

attention.

P305 + P351 + P338 + P310 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON

CENTER or doctor/ physician.

Other hazards

None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Chemical nature : Mixture

Hazardous ingredients

Chemical name	CAS-No.	Concentration (%)
Linalool	78-70-6	>= 20 - <= 50
Hydrocarbons, C11-C13, isoalkanes, <2% aro-	90622-58-5	>= 20 - < 30
matics		
citronellol	106-22-9	>= 1 - < 10
Limonene	5989-27-5	>= 1 - < 10
geraniol	106-24-1	>= 1 - < 10
p-menth-1-en-8-ol	98-55-5	>= 1 - < 10
1-(2,6,6-trimethyl-3-cyclohexen-1-yl)-2-buten-1-	57378-68-4	>= 0.1 - < 1
one		
tetrahydro-4-methyl-2-(2-methylprop-1-	16409-43-1	>= 0.1 - < 1
enyl)pyran		
2,4-dimethylcyclohex-3-ene-1-carbaldehyde	68039-49-6	>= 0.1 - < 1
7-methyl-3-methyleneocta-1,6-diene	123-35-3	>= < 0.1
pin-2(10)-ene	127-91-3	>= <= 0.1
pin-2(3)-ene	80-56-8	>= <= 0.1
caryophyllene	87-44-5	>= <= 0.1
gamma-Terpinene	99-85-4	>= <= 0.1
p-cymene	p-Methylcumene	>= <= 0.1
p-mentha-1,4(8)-diene	586-62-9	>= <= 0.1
Linalool	78-70-6	>= 90 - <= 100
Dipropylene glycol methyl ether	34590-94-8	>= 20 - < 30
citronellol	106-22-9	>= 5 - < 10
ethyl 2,3-epoxy-3-phenylbutyrate	77-83-8	>= 5 - < 10
orange oil	8008-57-9	>= 5 - < 10
p-menth-1-en-8-ol	98-55-5	>= 5 - < 10
2,4,4,7-tetramethyl-6-octen-3-one	74338-72-0	>= 1 - < 5
Hexanal	66-25-1	>= 1 - < 5
tetrahydro-4-methyl-2-(2-methylprop-1-	16409-43-1	>= 1 - < 5

Version Revision Date: MSDS Number: Date of last issue: -

1.0 10-24-2016 100000003297 Date of first issue: 10-24-2016

enyl)pyran		
2,2,2-trichloro-1-phenylethyl acetate	90-17-5	>= 1 - < 5
2,4-dimethylcyclohex-3-ene-1-carbaldehyde	68039-49-6	>= 1 - < 5

SECTION 4. FIRST AID MEASURES

General advice : No hazards which require special first aid measures.

If inhaled : Move to fresh air in case of accidental inhalation of vapors.

If symptoms persist, call a physician.

In case of skin contact : Wash off with soap and plenty of water.

Wash contaminated clothing before re-use.

If symptoms persist, call a physician.

In case of eye contact : In case of eye contact, remove contact lens and rinse imme-

diately with plenty of water, also under the eyelids, for at least

15 minutes.

If swallowed : Do NOT induce vomiting.

Most important symptoms and effects, both acute and

delayed

: No information available.

Notes to physician : No information available.

SECTION 5. FIRE-FIGHTING MEASURES

Suitable extinguishing media : Alcohol-resistant foam

Carbon dioxide (CO2)

Dry chemical

Unsuitable extinguishing

media

: Do NOT use water jet.

Specific hazards during fire

fighting

: Highly flammable liquid and vapor.

Hazardous combustion prod-

ucts

: Carbon monoxide, carbon dioxide and unburned

hydrocarbons (smoke).

Further information : Standard procedure for chemical fires.

Special protective equipment

for fire-fighters

: In the event of fire, wear self-contained breathing apparatus.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protec- : Ensure adequate ventilation.

SAFETY DATA SHEET

SCOTT® Continuous Air Freshener Refill - Mango

Version Revision Date: MSDS Number: Date of last issue: -

1.0 10-24-2016 100000003297 Date of first issue: 10-24-2016

tive equipment and emergency procedures

Remove all sources of ignition.

Environmental precautions : Prevent

: Prevent product from entering drains.

Methods and materials for containment and cleaning up

: Wipe up with absorbent material (e.g. cloth, fleece).

SECTION 7. HANDLING AND STORAGE

Advice on protection against

fire and explosion

: Normal measures for preventive fire protection.

Advice on safe handling : For personal protection see section 8.

No special handling advice required.

Conditions for safe storage : Keep container tightly closed in a dry and well-ventilated

place.

Materials to avoid : No special restrictions on storage with other products.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Ingredients with workplace control parameters

Ingredients	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
Dipropylene glycol methyl ether	34590-94-8	TWA	100 ppm	ACGIH
		STEL	150 ppm	ACGIH
		TWA	100 ppm 600 mg/m3	OSHA Z-1
		TWA	100 ppm 600 mg/m3	OSHA P0
		STEL	150 ppm 900 mg/m3	OSHA P0
		TWA	100 ppm 600 mg/m3	NIOSH REL
		ST	150 ppm 900 mg/m3	NIOSH REL
orange oil	8008-57-9	TWA (mist - total)	10 mg/m3	NIOSH REL
		TWA (mist - respirable)	5 mg/m3	NIOSH REL

Hazardous components without workplace control parameters

Ingredients	CAS-No.
Hydrocarbons, C11-C13,	90622-58-5
isoalkanes, <2% aromatics	

Version Revision Date: MSDS Number: Date of last issue: -

1.0 10-24-2016 100000003297 Date of first issue: 10-24-2016

Linalool	78-70-6
citronellol	106-22-9
ethyl 2,3-epoxy-3-	77-83-8
phenylbutyrate	00 55 5
p-menth-1-en-8-ol	98-55-5
2,4,4,7-tetramethyl-6-octen-3-	74338-72-0
one	
Hexanal	66-25-1
tetrahydro-4-methyl-2-(2- methylprop-1-enyl)pyran	16409-43-1
2,2,2-trichloro-1-phenylethyl	90-17-5
acetate	
2,4-dimethylcyclohex-3-ene-1-carbaldehyde	68039-49-6

Personal protective equipment

Respiratory protection : No personal respiratory protective equipment normally

required.

Hand protection

Remarks : For prolonged or repeated contact use protective gloves.

Eye protection : Not required under normal use.

Skin and body protection : not required under normal use

Protective measures : No special protective equipment required.

Hygiene measures : General industrial hygiene practice.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : liquid

Color : colorless

Odor : pleasant

Flash point : 62 °C

Relative density : 0.842 - 0.846

SECTION 10. STABILITY AND REACTIVITY

Reactivity : Stable under recommended storage conditions.

Chemical stability : No decomposition if stored and applied as directed.

Version Revision Date: MSDS Number: Date of last issue: -

1.0 10-24-2016 100000003297 Date of first issue: 10-24-2016

Possibility of hazardous reac-

tions

: No hazards to be specially mentioned.

Conditions to avoid : Heat, flames and sparks.

Incompatible materials : Strong acids and oxidizing agents

Hazardous decomposition

products

: Stable under recommended storage conditions.

SECTION 11. TOXICOLOGICAL INFORMATION

Acute toxicity

Fatal if swallowed or in contact with skin.

Ingredients:

Linalool:

Acute oral toxicity : LD50 Oral (Mouse, male and female): 3,500 mg/kg

Method: OECD Test Guideline 401

GLP: no

Acute inhalation toxicity : LC50 (Mouse, male and female): 3.2 mg/l

Method: No information available.

GLP: no

Acute dermal toxicity : LD50 Dermal (Albino rabbit): 5,610 mg/kg

Method: OECD Test Guideline 402

GLP: no

Limonene:

Acute oral toxicity : LD50 Oral (Rat, female): > 2,000 mg/kg

Method: OECD Test Guideline 423

GLP: yes

geraniol:

Acute oral toxicity : LD50 Oral (Rat, male and female): 3,600 mg/kg

Method: No information available. GLP: No information available.

Acute dermal toxicity : LD50 Dermal (Rabbit): > 5,000 mg/kg

Method: Acute toxicity estimate

GLP: no

p-menth-1-en-8-ol:

Acute oral toxicity : LD50 Oral (Mouse, male): 2,830 mg/kg

Acute dermal toxicity : LD50 Dermal (Rat, male and female): > 2,000 mg/kg

tetrahydro-4-methyl-2-(2-methylprop-1-enyl)pyran:

Acute oral toxicity : LD50 (Rat, male): > 2,000 mg/kg

Acute dermal toxicity : LD50 Dermal (Rabbit, male): > 2,000 mg/kg

Version Revision Date: MSDS Number: Date of last issue: -

1.0 10-24-2016 100000003297 Date of first issue: 10-24-2016

pin-2(10)-ene:

Acute oral toxicity : LD50 Oral (Rat): 5,000 mg/kg

Acute dermal toxicity : LD50 Dermal (Rabbit): > 5,000 mg/kg

gamma-Terpinene:

Acute oral toxicity : LD50 Oral (Rat, male and female): > 5,000 mg/kg

Acute inhalation toxicity : LC50 (Rat, male and female): > 5.42 mg/l

Exposure time: 4 h

Acute dermal toxicity : LD50 Dermal (Rat, male and female): > 2,500 mg/kg

Remarks: No significant adverse effects were reported

p-cymene:

Acute oral toxicity : LD50 Oral (Rat): 4,750 mg/kg

p-mentha-1,4(8)-diene:

Acute oral toxicity : LD50 Oral (Rat): 3,740 mg/kg

Method: OECD Test Guideline 401 GLP: No information available.

Acute dermal toxicity : LD50 Dermal (Rabbit): > 4,300 mg/kg

Method: OECD Test Guideline 402

GLP: no

Linalool:

Acute oral toxicity : LD50 Oral (Mouse, male and female): 3,500 mg/kg

Method: OECD Test Guideline 401

GLP: no

Acute inhalation toxicity : LC50 (Mouse, male and female): 3.2 mg/l

Method: No information available.

GLP: no

Acute dermal toxicity : LD50 Dermal (Albino rabbit): 5,610 mg/kg

Method: OECD Test Guideline 402

GLP: no

Dipropylene glycol methyl ether:

Acute oral toxicity : LD50 (Rat, male and female): > 5,000 mg/kg

ethyl 2,3-epoxy-3-phenylbutyrate:

Acute dermal toxicity : LD50 Dermal (Rat, male and female): > 2,000 mg/kg

Method: OECD Test Guideline 402

GLP: yes

orange oil:

Acute oral toxicity : LD50 Oral (Rat, male): > 5,000 mg/kg

Method: OECD Test Guideline 401

GLP: no

Acute dermal toxicity : LD50 Dermal (Rabbit, female): > 5,000 mg/kg

Version Revision Date: MSDS Number: Date of last issue: -

1.0 10-24-2016 100000003297 Date of first issue: 10-24-2016

Method: OECD Test Guideline 402

GLP: no

p-menth-1-en-8-ol:

Acute oral toxicity : LD50 Oral (Mouse, male): 2,830 mg/kg

Acute dermal toxicity : LD50 Dermal (Rat, male and female): > 2,000 mg/kg

2,4,4,7-tetramethyl-6-octen-3-one:

Acute oral toxicity : LD50 (Rat, male and female): > 2,000 mg/kg

Acute dermal toxicity : LD50 (Rat, male and female): > 2,000 mg/kg

tetrahydro-4-methyl-2-(2-methylprop-1-enyl)pyran:

Acute oral toxicity : LD50 (Rat, male): > 2,000 mg/kg

Acute dermal toxicity : LD50 Dermal (Rabbit, male): > 2,000 mg/kg

2,2,2-trichloro-1-phenylethyl acetate:

Acute oral toxicity : LD50 Oral (Rat): 2,275 mg/kg

Method: OECD Test Guideline 401 GLP: No information available.

Acute inhalation toxicity : LC50 (Rat, male and female): > 5 mg/l

Exposure time: 6 h

Method: OECD Test Guideline 403

GLP: yes

Acute dermal toxicity : LD50 (Rat, male and female): > 2,000 mg/kg

Method: OECD Test Guideline 402

GLP: yes

Skin corrosion/irritation

Causes skin irritation.

Product:

Remarks: Moderate skin irritation

Ingredients:

Linalool:

Species: Rabbit

Method: OECD Test Guideline 404

Result: Skin irritation

GLP: yes

citronellol: Species: Rabbit

Result: Skin irritation

Limonene:

Species: Rabbit

Method: OECD Test Guideline 404

Version Revision Date: MSDS Number: Date of last issue: -

1.0 10-24-2016 100000003297 Date of first issue: 10-24-2016

Result: No skin irritation

GLP: yes

geraniol:

Species: Rabbit

Method: OECD Test Guideline 404

Result: irritating

GLP: No information available.

p-menth-1-en-8-ol: Species: Rabbit

Result: irritating

tetrahydro-4-methyl-2-(2-methylprop-1-enyl)pyran:

Species: Rabbit Result: Skin irritation

2,4-dimethylcyclohex-3-ene-1-carbaldehyde:

Assessment: Irritating to skin.

pin-2(3)-ene:

Species: human keratinocytes Method: No information available.

Result: Skin irritation

GLP: yes

gamma-Terpinene:

Result: No skin irritation

p-cymene:

Result: Skin irritation

p-mentha-1,4(8)-diene:

Species: human skin

Method: OECD Test Guideline 439

Result: No skin irritation

GLP: yes

Linalool:

Species: Rabbit

Method: OECD Test Guideline 404

Result: Skin irritation

GLP: yes

Dipropylene glycol methyl ether:

Result: No skin irritation

citronellol:

Species: Rabbit Result: Skin irritation

ethyl 2,3-epoxy-3-phenylbutyrate:

Species: reconstructed human epidermis (RhE)

Method: OECD Test Guideline 439

Version Revision Date: MSDS Number: Date of last issue: -

1.0 10-24-2016 100000003297 Date of first issue: 10-24-2016

Result: No skin irritation

GLP: yes

orange oil: Species: Rabbit

Method: OECD Test Guideline 404

Result: irritating GLP: yes

p-menth-1-en-8-ol:
Species: Rabbit
Result: irritating

2,4,4,7-tetramethyl-6-octen-3-one:

Species: Rabbit Result: Skin irritation

tetrahydro-4-methyl-2-(2-methylprop-1-enyl)pyran:

Species: Rabbit Result: Skin irritation

2,2,2-trichloro-1-phenylethyl acetate:

Species: Rabbit

Method: No information available.

Result: Mild skin irritation

GLP: no

2,4-dimethylcyclohex-3-ene-1-carbaldehyde:

Assessment: Irritating to skin.

Serious eye damage/eye irritation

Causes serious eye irritation.

Product:

Remarks: Irritating to eyes.

Ingredients:

Linalool:

Species: Rabbit Result: Eye irritation

Method: OECD Test Guideline 405

GLP: no

citronellol: Species: Rabbit

Result: Eye irritation

Limonene:

Species: Rabbit

Result: No eye irritation

Method: OECD Test Guideline 405

GLP: yes

Version Revision Date: MSDS Number: Date of last issue: -

1.0 10-24-2016 100000003297 Date of first issue: 10-24-2016

geraniol:

Species: Rabbit

Result: Risk of serious damage to eyes. Method: OECD Test Guideline 405 GLP: No information available.

p-menth-1-en-8-ol:

Species: Rabbit Result: irritating

tetrahydro-4-methyl-2-(2-methylprop-1-enyl)pyran:

Species: Rabbit Result: Eye irritation

2,4-dimethylcyclohex-3-ene-1-carbaldehyde:

Assessment: Irritating to eyes.

gamma-Terpinene:

Result: No eye irritation

p-cymene:

Result: Eye irritation

p-mentha-1,4(8)-diene:

Species: Rabbit

Result: No eye irritation

Method: OECD Test Guideline 405

GLP: yes

Linalool:

Species: Rabbit Result: Eye irritation

Method: OECD Test Guideline 405

GLP: no

Dipropylene glycol methyl ether:

Result: No eye irritation

citronellol:

Species: Rabbit Result: Eye irritation

ethyl 2,3-epoxy-3-phenylbutyrate:

Species: Rabbit

Result: No eye irritation

Method: OECD Test Guideline 405

GLP: yes

orange oil:

Species: Rabbit

Result: No eye irritation

Method: OECD Test Guideline 405

GLP: yes

Version Revision Date: MSDS Number: Date of last issue: -

1.0 10-24-2016 100000003297 Date of first issue: 10-24-2016

p-menth-1-en-8-ol:

Species: Rabbit Result: irritating

2,4,4,7-tetramethyl-6-octen-3-one:

Species: Rabbit Result: No eye irritation

Hexanal:

Result: Eye irritation

tetrahydro-4-methyl-2-(2-methylprop-1-enyl)pyran:

Species: Rabbit Result: Eye irritation

2,2,2-trichloro-1-phenylethyl acetate:

Species: Rabbit Result: No eye irritation Exposure time: 24 h

Method: No information available.

GLP: no

2,4-dimethylcyclohex-3-ene-1-carbaldehyde:

Assessment: Irritating to eyes.

Respiratory or skin sensitization

Skin sensitization: May cause an allergic skin reaction.

Respiratory sensitization: Not classified based on available information.

Ingredients:

Linalool:

Species: Mouse

Assessment: Does not cause skin sensitization.

Method: No information available.

Result: Did not cause sensitization on laboratory animals.

GLP: no

citronellol:

Assessment: The product is a skin sensitizer, sub-category 1B. Result: The product is a skin sensitizer, sub-category 1B.

Limonene:

Species: Mouse

Method: OECD Test Guideline 429

Result: The product is a skin sensitizer, sub-category 1B.

GLP: yes

geraniol:

Species: Mouse

Method: OECD Test Guideline 429

Result: May cause sensitization by skin contact.

GLP: No information available.

Version Revision Date: MSDS Number: Date of last issue: -

1.0 10-24-2016 100000003297 Date of first issue: 10-24-2016

p-menth-1-en-8-ol:

Species: Rat

Result: Did not cause sensitization on laboratory animals.

tetrahydro-4-methyl-2-(2-methylprop-1-enyl)pyran:

Species: Guinea pig

Result: Did not cause sensitization on laboratory animals.

2,4-dimethylcyclohex-3-ene-1-carbaldehyde:

Assessment: The product is a skin sensitizer, sub-category 1B.

pin-2(3)-ene:

Species: Mouse

Method: OECD Test Guideline 429 Result: Causes sensitization.

GLP: yes

p-mentha-1,4(8)-diene:

Species: Mouse

Method: OECD Test Guideline 429 Result: Causes sensitization.

GLP: yes

Linalool:

Species: Mouse

Assessment: Does not cause skin sensitization.

Method: No information available.

Result: Did not cause sensitization on laboratory animals.

GLP: no

Dipropylene glycol methyl ether:

Result: Did not cause sensitization on laboratory animals.

citronellol:

Assessment: The product is a skin sensitizer, sub-category 1B. Result: The product is a skin sensitizer, sub-category 1B.

ethyl 2,3-epoxy-3-phenylbutyrate:

Test Type: Maximization Test

Species: Guinea pig Method: Maximization Test Result: Causes sensitization.

GLP: no

orange oil:

Species: Mouse

Method: OECD Test Guideline 429 Result: Causes sensitization.

GLP: yes

p-menth-1-en-8-ol:

Species: Rat

Result: Did not cause sensitization on laboratory animals.

Version Revision Date: MSDS Number: Date of last issue: -

1.0 10-24-2016 100000003297 Date of first issue: 10-24-2016

2,4,4,7-tetramethyl-6-octen-3-one:

Species: Guinea pig

Result: Did not cause sensitization on laboratory animals.

tetrahydro-4-methyl-2-(2-methylprop-1-enyl)pyran:

Species: Guinea pig

Result: Did not cause sensitization on laboratory animals.

2,2,2-trichloro-1-phenylethyl acetate:

Test Type: Maximization Test

Species: Guinea pig Method: Maximization Test

Result: Did not cause sensitization on laboratory animals.

GLP: No information available.

2,4-dimethylcyclohex-3-ene-1-carbaldehyde:

Assessment: The product is a skin sensitizer, sub-category 1B.

Germ cell mutagenicity

Not classified based on available information.

Carcinogenicity

Not classified based on available information.

IARC No ingredient of this product present at levels greater than or

equal to 0.1% is identified as probable, possible or confirmed

human carcinogen by IARC.

OSHA No ingredient of this product present at levels greater than or

equal to 0.1% is identified as a carcinogen or potential carcino-

gen by OSHA.

NTP No ingredient of this product present at levels greater than or

equal to 0.1% is identified as a known or anticipated carcinogen

by NTP.

Reproductive toxicity

Not classified based on available information.

Ingredients:

tetrahydro-4-methyl-2-(2-methylprop-1-enyl)pyran:

Reproductive toxicity - As- : Suspected of damaging fertility. Suspected of damaging the

sessment unborn child.

tetrahydro-4-methyl-2-(2-methylprop-1-enyl)pyran:

Reproductive toxicity - As- : Suspected of damaging fertility. Suspected of damaging the

sessment unborn child.

STOT-single exposure

Not classified based on available information.

Version Revision Date: MSDS Number: Date of last issue: -

1.0 10-24-2016 100000003297 Date of first issue: 10-24-2016

STOT-repeated exposure

Not classified based on available information.

Aspiration toxicity

Not classified based on available information.

Ingredients:

Limonene:

May be fatal if swallowed and enters airways.

pin-2(3)-ene:

May be fatal if swallowed and enters airways.

p-cymene:

May be fatal if swallowed and enters airways.

p-mentha-1,4(8)-diene:

May be fatal if swallowed and enters airways.

Further information

Product:

Remarks: No data available

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Product:

Toxicity to fish

Remarks: No information available.

Toxicity to daphnia and other

aquatic invertebrates

Remarks: No information available.

Toxicity to algae

Remarks: No information available.

Ingredients:

Linalool:

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 27.8 mg/l

Exposure time: 96 h Test Type: static test

Method: OECD Test Guideline 203

GLP: yes

Toxicity to daphnia and other

aquatic invertebrates

: EC50 (Daphnia magna (Water flea)): 59 mg/l

Exposure time: 48 h Test Type: static test

Method: OECD Test Guideline 202

GLP: yes

Version Revision Date: MSDS Number: Date of last issue: -

1.0 10-24-2016 100000003297 Date of first issue: 10-24-2016

Toxicity to algae : EC50 (Desmodesmus subspicatus (green algae)): 88.3 mg/l

Exposure time: 96 h Test Type: static test

Method: see user defined free text

GLP: no

citronellol:

Toxicity to fish : LC50: 14.66 mg/l

Exposure time: 96 h

Toxicity to daphnia and other

aquatic invertebrates

: EC50: 17.48 mg/l Exposure time: 48 h

Toxicity to algae : EC50: 2.4 mg/l

Exposure time: 72 h

Limonene:

Toxicity to fish : LC50 (Pimephales promelas (fathead minnow)): 0.720 mg/l

Exposure time: 96 h

Method: OECD Test Guideline 203

Toxicity to daphnia and other

aquatic invertebrates

: EC50 (Daphnia magna (Water flea)): 0.36 mg/l

Exposure time: 48 h

Method: OECD Test Guideline 202

GLP: yes

Toxicity to algae : EC50 (Desmodesmus subspicatus (green algae)): 8 mg/l

Exposure time: 72 h

Method: OECD Test Guideline 201

GLP: yes

geraniol:

Toxicity to fish : LC50 (Danio rerio (zebra fish)): 22 mg/l

Exposure time: 96 h Test Type: static test

Method: OECD Test Guideline 203

GLP: yes

Toxicity to daphnia and other

aquatic invertebrates

EC50 (Daphnia magna (Water flea)): 10.8 mg/l

Exposure time: 48 h Test Type: static test

Method: OECD Test Guideline 202

GLP: yes

Toxicity to algae : EC50 (Desmodesmus subspicatus (green algae)): 13.1 mg/l

Exposure time: 72 h Test Type: static test

Method: OECD Test Guideline 201

GLP: yes

p-menth-1-en-8-ol:

Toxicity to fish : LC50: 70 mg/l

Exposure time: 96 h

Version Revision Date: MSDS Number: Date of last issue: -

1.0 10-24-2016 100000003297 Date of first issue: 10-24-2016

Toxicity to daphnia and other : EC50: 73 mg/l

aquatic invertebrates Exposure time: 48 h

Toxicity to algae : EC50: 68 mg/l

Exposure time: 72 h

tetrahydro-4-methyl-2-(2-methylprop-1-enyl)pyran: Toxicity to fish : LC50: 77.6 mg/l

Exposure time: 96 h

Toxicity to daphnia and other

aquatic invertebrates

: EC50: 33.2 mg/l Exposure time: 48 h

Toxicity to algae : EC50: 36 mg/l

Exposure time: 72 h

2,4-dimethylcyclohex-3-ene-1-carbaldehyde:

Ecotoxicology Assessment

Chronic aquatic toxicity : Harmful to aquatic life with long lasting effects.

pin-2(10)-ene:

Toxicity to fish : LC50 (Cyprinus carpio (Carp)): 0.557 mg/l

Exposure time: 96 h

pin-2(3)-ene:

Toxicity to fish : LC50 (Pimephales promelas (fathead minnow)): 0.280 mg/l

Exposure time: 96 h

Test Type: flow-through test Method: OECD Test Guideline 203 GLP: No information available.

Toxicity to daphnia and other

aquatic invertebrates

: EC50 (Daphnia magna (Water flea)): 1.440 mg/l

Exposure time: 48 h

Test Type: flow-through test Method: OECD Test Guideline 202 GLP: No information available.

Ecotoxicology Assessment

Acute aquatic toxicity : This product has no known ecotoxicological effects.

Chronic aquatic toxicity : This product has no known ecotoxicological effects.

gamma-Terpinene:

Toxicity to fish : LC50 (Danio rerio (zebra fish)): > 1,000 mg/l

Exposure time: 96 h

Toxicity to daphnia and other

aquatic invertebrates

: EC50 (Daphnia magna (Water flea)): > 100 mg/l

Exposure time: 48 h

Toxicity to algae : EC50 (Pseudokirchneriella subcapitata (green algae)): > 100

mg/l

Exposure time: 72 h

Version Revision Date: MSDS Number: Date of last issue: -

1.0 10-24-2016 100000003297 Date of first issue: 10-24-2016

p-mentha-1,4(8)-diene:

Toxicity to fish : LC50 (Danio rerio (zebra fish)): 0.805 mg/l

Exposure time: 96 h Test Type: semi-static test

Method: OECD Test Guideline 203

GLP: yes

Toxicity to daphnia and other

aquatic invertebrates

EC50 (Daphnia magna (Water flea)): 0.634 mg/l

Exposure time: 48 h Test Type: semi-static test

Method: OECD Test Guideline 202

GLP: yes

Toxicity to algae : EC50 (Pseudokirchneriella subcapitata (green algae)): 0.692

mg/

Exposure time: 72 h Test Type: static test

Method: OECD Test Guideline 201

GLP: yes

Linalool:

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 27.8 mg/l

Exposure time: 96 h Test Type: static test

Method: OECD Test Guideline 203

GLP: yes

Toxicity to daphnia and other

aquatic invertebrates

: EC50 (Daphnia magna (Water flea)): 59 mg/l

Exposure time: 48 h Test Type: static test

Method: OECD Test Guideline 202

GLP: yes

Toxicity to algae : EC50 (Desmodesmus subspicatus (green algae)): 88.3 mg/l

Exposure time: 96 h Test Type: static test

Method: see user defined free text

GLP: no

Dipropylene glycol methyl ether:

Toxicity to fish : LC50: > 1,000 mg/l

Exposure time: 96 h

Toxicity to daphnia and other

aquatic invertebrates

: EC50: > 1,000 mg/l Exposure time: 96 h

Toxicity to algae : NOEC: 969 mg/l

Exposure time: 72 h

citronellol:

Toxicity to fish : LC50: 14.66 mg/l

Exposure time: 96 h

Toxicity to daphnia and other : EC50: 17.48 mg/l

Version Revision Date: MSDS Number: Date of last issue: -

1.0 10-24-2016 100000003297 Date of first issue: 10-24-2016

aquatic invertebrates Exposure time: 48 h

Toxicity to algae : EC50: 2.4 mg/l

Exposure time: 72 h

ethyl 2,3-epoxy-3-phenylbutyrate:

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 4.2 mg/l

Exposure time: 96 h
Test Type: semi-static test

Method: OECD Test Guideline 203

GLP: yes

Toxicity to daphnia and other

aquatic invertebrates

EC50 (Daphnia magna (Water flea)): 95 mg/l

Exposure time: 24 h Test Type: static test

Method: OECD Test Guideline 202

GLP: yes

Toxicity to algae : EC50 (Pseudokirchneriella subcapitata (green algae)): 36 mg/l

Exposure time: 72 h Test Type: static test

Method: OECD Test Guideline 201

GLP: yes

Ecotoxicology Assessment

Chronic aquatic toxicity : Toxic to aquatic life with long lasting effects.

orange oil:

Toxicity to daphnia and other

aquatic invertebrates

: EC50 (Daphnia magna (Water flea)): 0.62 mg/l

Exposure time: 48 h Test Type: static test

Method: OECD Test Guideline 202

GLP: no

Toxicity to algae : EC50 (Pseudokirchneriella subcapitata (green algae)): 1.5

mq/

Exposure time: 72 h

Method: OECD Test Guideline 201

GLP: no

p-menth-1-en-8-ol:

Toxicity to fish : LC50: 70 mg/l

Exposure time: 96 h

Toxicity to daphnia and other

aquatic invertebrates

: EC50: 73 mg/l

Exposure time: 48 h

Toxicity to algae : EC50: 68 mg/l

Exposure time: 72 h

2,4,4,7-tetramethyl-6-octen-3-one:

Toxicity to fish : LC50 (Brachydanio rerio (zebrafish)): 8.6 mg/l

Exposure time: 96 h

Version Revision Date: MSDS Number: Date of last issue: -

10-24-2016 1.0 10000003297 Date of first issue: 10-24-2016

aquatic invertebrates

Toxicity to daphnia and other : EC50 (Daphnia magna (Water flea)): 2.9 mg/l

Exposure time: 24 h

Toxicity to algae : EC50 (Desmodesmus subspicatus (green algae)): 7.2 mg/l

Exposure time: 72 h

tetrahydro-4-methyl-2-(2-methylprop-1-enyl)pyran:

Toxicity to fish : LC50: 77.6 mg/l

Exposure time: 96 h

Toxicity to daphnia and other : EC50: 33.2 mg/l

aquatic invertebrates

Exposure time: 48 h

: EC50: 36 mg/l Toxicity to algae

Exposure time: 72 h

2,2,2-trichloro-1-phenylethyl acetate:

: LC50 (Oryzias latipes (Japanese medaka)): 13.51 mg/l Toxicity to fish

Exposure time: 96 h

Test Type: flow-through test Method: No information available. GLP: No information available.

Toxicity to algae : EC50 (Pseudokirchneriella subcapitata (green algae)): 19.39

Exposure time: 72 h

Method: No information available.

GLP: no

2,4-dimethylcyclohex-3-ene-1-carbaldehyde:

Ecotoxicology Assessment

Chronic aquatic toxicity : Harmful to aquatic life with long lasting effects.

Persistence and degradability

Product:

: Remarks: No information available. Biodegradability

Ingredients:

Linalool:

Biodegradability : Result: Readily biodegradable.

citronellol:

Biodegradability : Result: Readily biodegradable.

geraniol:

Biodegradability : Result: Readily biodegradable.

p-menth-1-en-8-ol:

Biodegradability : Result: Readily biodegradable.

tetrahydro-4-methyl-2-(2-methylprop-1-enyl)pyran:

Version Revision Date: MSDS Number: Date of last issue: -

1.0 10-24-2016 100000003297 Date of first issue: 10-24-2016

Biodegradability : Result: Readily biodegradable.

pin-2(3)-ene:

Biodegradability : Result: Readily biodegradable.

Linalool:

Biodegradability : Result: Readily biodegradable.

citronellol:

Biodegradability : Result: Readily biodegradable.

p-menth-1-en-8-ol:

Biodegradability : Result: Readily biodegradable.

tetrahydro-4-methyl-2-(2-methylprop-1-enyl)pyran:

Biodegradability : Result: Readily biodegradable.

2,2,2-trichloro-1-phenylethyl acetate:

Biodegradability : Result: Not readily biodegradable.

Bioaccumulative potential

Product:

Bioaccumulation : Remarks: Does not bioaccumulate.

Ingredients:

citronellol:

Partition coefficient: n- :

octanol/water

: log Pow: 3.55 (25 °C)

Limonene:

Partition coefficient: n-

octanol/water

: log Pow: 4.38

geraniol:

Partition coefficient: n-

: log Pow: 3.56

octanol/water

p-menth-1-en-8-ol:

Partition coefficient: n-

: log Pow: 2.6

octanol/water

tetrahydro-4-methyl-2-(2-methylprop-1-enyl)pyran:

Partition coefficient: n- : log Pow: 3.3

octanol/water

7-methyl-3-methyleneocta-1,6-diene:

Partition coefficient: n-

: Remarks: No information available.

octanol/water

pin-2(10)-ene:

Partition coefficient: n- : log Pow: 4.425

Version Revision Date: MSDS Number: Date of last issue: -

1.0 10-24-2016 100000003297 Date of first issue: 10-24-2016

octanol/water

pin-2(3)-ene:

Partition coefficient: n- : log Pow: 4.487

octanol/water

gamma-Terpinene:

Partition coefficient: n- : log Pow: 1.4 (23 °C)

octanol/water

p-mentha-1,4(8)-diene:

Partition coefficient: n- : log Pow: 4.29

octanol/water

Dipropylene glycol methyl ether:

Partition coefficient: n- : log Pow: -0.064

octanol/water

citronellol:

Partition coefficient: n- : log Pow: 3.55 (25 °C)

octanol/water

ethyl 2,3-epoxy-3-phenylbutyrate:

Partition coefficient: n- : log Pow: 2.4

octanol/water

orange oil:

Partition coefficient: n- : log Pow: 2.78 - 4.88

octanol/water

p-menth-1-en-8-ol:

Partition coefficient: n- : log Pow: 2.6

octanol/water

2,4,4,7-tetramethyl-6-octen-3-one:

Partition coefficient: n- : log Pow: 4.5

octanol/water

tetrahydro-4-methyl-2-(2-methylprop-1-enyl)pyran:

Partition coefficient: n- : log Pow: 3.3

octanol/water

2,2,2-trichloro-1-phenylethyl acetate:

Partition coefficient: n- : log Pow: 3.854

octanol/water

Mobility in soil

Product:

Mobility : Remarks: No information available.

Version Revision Date: MSDS Number: Date of last issue: -

1.0 10-24-2016 100000003297 Date of first issue: 10-24-2016

Other adverse effects

Product:

Results of PBT and vPvB

assessment

: Remarks: Based on available data, the classification criteria

are not met

Ozone-Depletion Potential : Regulation: 40 CFR Protection of Environment; Part 82 Pro-

tection of Stratospheric Ozone - CAA Section 602 Class I

Substances

Remarks: This product neither contains, nor was

manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A +

B).

Additional ecological infor-

mation

: There is no data available for this product.

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods

Waste from residues : Dispose of in accordance with local regulations.

Contaminated packaging : Dispose of as unused product.

Do not re-use empty containers.

SECTION 14. TRANSPORT INFORMATION

International Regulation

UNRTDG

UN number : UN 1169

Proper shipping name : EXTRACTS, AROMATIC, LIQUID

Class : 3
Packing group : III
Labels : 3

IATA-DGR

Not permitted for transport

IMDG-Code

Not permitted for transport

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable for product as supplied.

Domestic regulation

49 CFR

UN/ID/NA number : UN 1169

Proper shipping name : EXTRACTS, AROMATIC, LIQUID

Version Revision Date: MSDS Number: Date of last issue: -

1.0 10-24-2016 100000003297 Date of first issue: 10-24-2016

Class : 3 Packing group : III

Labels : <** Description for Danger Label not available: [Z8] Dan-

gerLabelNo 3 DG regulation CFR **>

ERG Code : 127 Marine pollutant : no

SECTION 15. REGULATORY INFORMATION

TSCA list : No substances are subject to a Significant New Use Rule.

EPCRA - Emergency Planning and Community Right-to-Know

CERCLA Reportable Quantity

This material does not contain any components with a CERCLA RQ.

SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

SARA 311/312 Hazards : Fire Hazard

SARA 302 : No chemicals in this material are subject to the reporting

requirements of SARA Title III, Section 302.

SARA 313 : This material does not contain any chemical components with

known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

Clean Air Act

This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).

This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 112 (40 CFR 61).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 111 SOCMI Intermediate or Final VOC's (40 CFR 60.489).

Clean Water Act

This product does not contain any Hazardous Substances listed under the U.S. CleanWater Act, Section 311, Table 116.4A.

This product does not contain any Hazardous Chemicals listed under the U.S. CleanWater Act, Section 311, Table 117.3.

This product does not contain any toxic pollutants listed under the U.S. Clean Water Act Section 307

US State Regulations

Massachusetts Right To Know

Dipropylene glycol methyl ether 34590-94-8 20 - 30 % Hexanal 66-25-1 1 - 5 %

Massachusetts Right To Know

Version 1.0	Revision Date: 10-24-2016	MSDS Number: 100000003297	Date of last issue: - Date of first issue: 10-24-2016	
	Dipropylen Hexanal	e glycol methyl ether	34590-94-8 66-25-1	20 - 30 % 1 - 5 %
Penn	sylvania Right To Kn	iow		
		ons, C11-C13, isoalkane	s, <2% 90622-58-5	90 - 100 %
	Linalool		78-70-6	90 - 100 %
	Dipropylen	e glycol methyl ether	34590-94-8	20 - 30 %
	citronellol		106-22-9	5 - 10 %
	ethyl 2,3-e	poxy-3-phenylbutyrate	77-83-8	5 - 10 %
	orange oil		8008-57-9	5 - 10 %
	p-menth-1-	-en-8-ol	98-55-5	5 - 10 %
	undecan-4	-olide	104-67-6	5 - 10 %
	Hexanal		66-25-1	1 - 5 %
Penn	sylvania Right To Kn	ow		
	•	ons, C11-C13, isoalkane	s, <2% 90622-58-5	90 - 100 %
	Linalool		78-70-6	90 - 100 %
	Dipropylen	e glycol methyl ether	34590-94-8	20 - 30 %
	citronellol		106-22-9	5 - 10 %
	ethyl 2,3-e	poxy-3-phenylbutyrate	77-83-8	5 - 10 %
	orange oil		8008-57-9	5 - 10 %
	p-menth-1-	-en-8-ol	98-55-5	5 - 10 %
	undecan-4	-olide	104-67-6	5 - 10 %
	Hexanal		66-25-1	1 - 5 %
New	Jersey Right To Know	W		
	Hydrocarbo aromatics	ons, C11-C13, isoalkane	s, <2% 90622-58-5	90 - 100 %
	Linalool		78-70-6	90 - 100 %
	Dipropylen	e glycol methyl ether	34590-94-8	20 - 30 %
	citronellol		106-22-9	5 - 10 %
	ethyl 2,3-e	poxy-3-phenylbutyrate	77-83-8	5 - 10 %
	orange oil		8008-57-9	5 - 10 %
	p-menth-1-		98-55-5	5 - 10 %
	undecan-4	-olide	104-67-6	5 - 10 %
	Hexanal		66-25-1	1 - 5 %
New	Jersey Right To Know	w		
	Hydrocarbo aromatics	ons, C11-C13, isoalkane	s, <2% 90622-58-5	90 - 100 %
	Linalool		78-70-6	90 - 100 %
	Dipropylen	e glycol methyl ether	34590-94-8	20 - 30 %
	citronellol		106-22-9	5 - 10 %
	ethyl 2,3-e	poxy-3-phenylbutyrate	77-83-8	5 - 10 %
	orange oil		8008-57-9	5 - 10 %
	p-menth-1-	-en-8-ol	98-55-5	5 - 10 %
	undecan-4	-olide	104-67-6	5 - 10 %
	Hexanal		66-25-1	1 - 5 %

Version Revision Date: MSDS Number: Date of last issue: -

1.0 10-24-2016 100000003297 Date of first issue: 10-24-2016

California Prop 65 This product does not contain any chemicals known to the

State of California to cause cancer, birth, or any other

reproductive defects.

The ingredients of this product are reported in the following inventories:

: This product contains the following components that are not on the Canadian DSL nor NDSL.

: Hydrocarbons, C11-C13, isoalkanes, <2% aromatics

: 2,4,4,7-tetramethyl-6-octen-3-one

: Ethyl octahydro-4,7-methano-3aH-indene-3a-carboxylate

: On the inventory, or in compliance with the inventory

: Not in compliance with the inventory

: Ethyl octahydro-4,7-methano-3aH-indene-3a-carboxylate

: Not in compliance with the inventory

: orange oil

: 2,4,4,7-tetramethyl-6-octen-3-one

: 2-Butenoic acid, 1-cyclohexylethyl ester

: Cyclopentanone, 2-[2-(4-methyl-3-cyclohexen-1-yl)propyl]-

: 1-(2,6,6-trimethyl-3-cyclohexen-1-yl)-2-buten-1-one

: 2,4-dimethylcyclohex-3-ene-1-carbaldehyde

: 2,6-dimethylhept-5-enal

: Not in compliance with the inventory

: orange oil

: Ethyl octahydro-4,7-methano-3aH-indene-3a-carboxylate

: 1-(2,6,6-trimethyl-3-cyclohexen-1-yl)-2-buten-1-one

: Not in compliance with the inventory

: 2,4,4,7-tetramethyl-6-octen-3-one

: Cyclopentanone, 2-[2-(4-methyl-3-cyclohexen-1-yl)propyl]-

: On the inventory, or in compliance with the inventory

Version Revision Date: MSDS Number: Date of last issue: -

10-24-2016 10000003297 Date of first issue: 10-24-2016 1.0

: On the inventory, or in compliance with the inventory

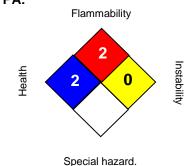
Inventories

AICS (Australia), DSL (Canada), IECSC (China), REACH (European Union), ENCS (Japan), ISHL (Japan), KECI (Korea), NZIoC (New Zealand), PICCS (Philippines), TCSI (Taiwan), TSCA (USA)

SECTION 16. OTHER INFORMATION

Further information

NFPA:



HMIS III:

HEALTH	2
FLAMMABILITY	2
PHYSICAL HAZARD	0

0 = not significant, 1 = Slight,

2 = Moderate, 3 = High 4 = Extreme, * = Chronic

Revision Date : 10-24-2016

The information provided in this Material 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.

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