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### **SAFETY DATA SHEET**

#### 1. Identification

Product identifier: TERAND DRY AIR FRESHENER NEUTRA AIR

Other means of identification

**SDS number:** RE1000012833

Recommended restrictions

Product Use: Air Freshener Restrictions on use: Not known.

#### Manufacturer/Importer/Distributor Information

#### Manufacturer

Company Name: CPC

Address: 1000 INTEGRAM DRIVE

PACIFIC, MO 63069

Telephone: 1-800-327-1835

Fax:

Emergency telephone number: 1-866-836-8855

#### 2. Hazard(s) identification

#### **Hazard Classification**

#### **Physical Hazards**

Flammable aerosol Category 1

**Health Hazards** 

Serious Eye Damage/Eye Irritation Category 2A Specific Target Organ Toxicity - Category 3<sup>1</sup>

Single Exposure

#### **Target Organs**

Narcotic effect.

#### **Label Elements**

#### **Hazard Symbol:**



Signal Word: Danger

**Hazard Statement:** Extremely flammable aerosol.

Causes serious eye irritation. May cause drowsiness or dizziness.



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Precautionary Statements

**Prevention:** Keep away from heat, hot surfaces, sparks, open flames and other ignition

sources. No smoking. Do not spray on an open flame or other ignition source. Do not pierce or burn, even after use. Wash thoroughly after handling. Wear protective gloves/protective clothing/eye protection/face protection. Avoid breathing dust/fume/gas/mist/vapors/spray. Use only

outdoors or in a well-ventilated area.

**Response:** IF INHALED: Remove person to fresh air and keep comfortable for

breathing. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye

irritation persists: Get medical advice/attention. Call a POISON

CENTER/doctor if you feel unwell.

Storage: Protect from sunlight. Do not expose to temperatures exceeding

50°C/122°F. Store in a well-ventilated place. Keep container tightly closed.

Store locked up.

**Disposal:** Dispose of contents/container to an appropriate treatment and disposal

facility in accordance with applicable laws and regulations, and product

characteristics at time of disposal.

Hazard(s) not otherwise classified (HNOC):

None.

#### 3. Composition/information on ingredients

#### **Mixtures**

Chemical Identity	CAS number	Content in percent (%)*
2-Propanone	67-64-1	50 - <100%
Propane	74-98-6	10 - <20%
Butane	106-97-8	10 - <20%
Oils, orange, sweet	8008-57-9	0.1 - <1%
1,2-Benzenedicarboxylic acid, 1,2-diethyl ester	84-66-2	0.1 - <1%
Acetic acid, pentyl ester	628-63-7	0.1 - <1%
Bicyclo[3.1.1]hept-2-ene, 2,6,6-trimethyl-	80-56-8	0 - <0.1%
Acetic acid, phenylmethyl ester	140-11-4	0 - <0.1%
Benzene, 1,1'-oxybis-	101-84-8	0 - <0.1%
2,6-Octadienal, 3,7-dimethyl-	5392-40-5	0 - <0.1%

<sup>\*</sup> All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

#### 4. First-aid measures

**Ingestion:** Rinse mouth thoroughly.

**Inhalation:** Move to fresh air.



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**Skin Contact:** Remove contaminated clothing and wash the skin thoroughly with soap and

water after work.

**Eye contact:** Immediately flush with plenty of water for at least 15 minutes. If easy to do,

remove contact lenses. Get medical attention.

Most important symptoms/effects, acute and delayed

**Symptoms:** No data available.

**Hazards:** No data available.

Indication of immediate medical attention and special treatment needed

**Treatment:** No data available.

5. Fire-fighting measures

General Fire Hazards: Use water spray to keep fire-exposed containers cool. Fight fire from a

protected location. Move containers from fire area if you can do so without

risk.

Suitable (and unsuitable) extinguishing media

Suitable extinguishing

media:

Use fire-extinguishing media appropriate for surrounding materials.

Unsuitable extinguishing

media:

Do not use water jet as an extinguisher, as this will spread the fire.

Specific hazards arising from

the chemical:

Vapors may travel considerable distance to a source of ignition and flash

back.

Special protective equipment and precautions for firefighters

**Special fire fighting** 

procedures:

No data available.

Special protective equipment

for fire-fighters:

Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in

enclosed spaces, SCBA.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures: Ventilate closed spaces before entering them. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Keep

upwind.

Methods and material for containment and cleaning

up:

Absorb spill with vermiculite or other inert material, then place in a container for chemical waste.

Notification Procedures: Prevent entry into waterways, sewer, basements or confined areas. Stop

the flow of material, if this is without risk. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Stop leak if you

can do so without risk.



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**Environmental Precautions:** Do not contaminate water sources or sewer. Prevent further leakage or

spillage if safe to do so.

#### 7. Handling and storage

Precautions for safe handling: Avoid contact with eyes. Wash hands thoroughly after handling. Keep away

from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Do not spray on an open flame or other ignition source. Do not pierce or burn, even after use. Do not handle until all safety precautions have been read and understood. Obtain special instructions before use.

Use personal protective equipment as required.

Conditions for safe storage, including any incompatibilities:

Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C. Do not pierce or burn, even after use. Store

locked up. Aerosol Level 3

#### 8. Exposure controls/personal protection

#### **Control Parameters**

**Occupational Exposure Limits** 

Chemical Identity	Туре	Exposure Lir	nit Values	Source
2-Propanone	STEL		2,400 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000) (1989)
	STEL	750 ppm	1,780 mg/m3	US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants (09 2006)
	PEL	1,000 ppm	2,400 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)
	TWA	250 ppm		US. ACGIH Threshold Limit Values (03 2015)
	TWA	750 ppm	1,800 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000) (1989)
	Ceiling	3,000 ppm		US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants (09 2006)
	STEL	500 ppm		US. ACGIH Threshold Limit Values (03 2015)
	TWA PEL	500 ppm	1,200 mg/m3	US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants (09 2006)
	REL	250 ppm	590 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards (2005)
Propane	REL	1,000 ppm	1,800 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards (2005)
	PEL	1,000 ppm	1,800 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)
	TWA PEL	1,000 ppm	1,800 mg/m3	US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants (09 2006)
	TWA	1,000 ppm	1,800 mg/m3	US. Tennessee. OELs. Occupational Exposure Limits, Table Z1A (06 2008)
	TWA	1,000 ppm	1,800 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000) (1989)
Butane	REL	800 ppm	1,900 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards (2005)
	TWA		1,900 mg/m3	US. Tennessee. OELs. Occupational Exposure Limits, Table Z1A (06 2008)
	STEL	1,000 ppm		US. ACGIH Threshold Limit Values (03 2018)
	TWA	800 ppm	1,900 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000) (1989)
	AN ESL		3,000 ppb	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (11 2016)
	AN ESL		7,100 µg/m3	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (11



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				2016)
	TWA PEL	800 ppm	1,900 mg/m3	US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants (09 2006)
	ST ESL		66,000 μg/m3	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (11 2016)
	ST ESL		28,000 ppb	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (11 2016)
1,2-Benzenedicarboxylic acid, 1,2-diethyl ester	REL		5 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards (2005)
	TWA		5 mg/m3	US. ACGIH Threshold Limit Values (2008)
	TWA PEL		5 mg/m3	US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants (09 2006)
	TWA		5 mg/m3	US. ÔSHA Table Z-1-A (29 CFR 1910.1000) (1989)
	TWA		5 mg/m3	US. Tennessee. OELs. Occupational Exposure Limits, Table Z1A (06 2008)
	ST ESL		50 μg/m3	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (11 2016)
	AN ESL		5 μg/m3	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (11 2016)
Acetic acid, pentyl ester	REL	100 ppm	525 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards (2005)
	TWA	50 ppm		US. ACGIH Threshold Limit Values (2008)
	STEL	100 ppm		US. ACGIH Threshold Limit Values (2008)
	STEL	100 ppm	532 mg/m3	US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants (09 2006)
	TWA PEL	50 ppm	266 mg/m3	US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants (09 2006)
	TWA	100 ppm	525 mg/m3	US. Tennessee. OELs. Occupational Exposure Limits, Table Z1A (06 2008)
	ST ESL		2,700 µg/m3	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (11 2016)
	ST ESL		500 ppb	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (11 2016)
	AN ESL		50 ppb	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (11 2016)
	AN ESL		270 μg/m3	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (11 2016)
	PEL	100 ppm	525 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)
	TWA	100 ppm	525 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000) (1989)
Bicyclo[3.1.1]hept-2-ene, 2,6,6-trimethyl-	TWA	20 ppm		US. ACGIH Threshold Limit Values (2008)
	ST ESL		3,500 µg/m3	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (11 2016)
	ST ESL		630 ppb	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (11 2016)
	AN ESL		63 ppb	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (11 2016)
	AN ESL		350 µg/m3	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (11 2016)
Acetic acid, phenylmethyl ester	TWA	10 ppm		US. ACGIH Threshold Limit Values (2008)
	TWA PEL	10 ppm	61 mg/m3	US. California Code of Regulations, Title 8,



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	T T			I O
				Section 5155. Airborne Contaminants (09 2006)
	ST ESL		100 ppb	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (11 2016)
	AN ESL		10 ppb	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (11 2016)
	ST ESL		610 µg/m3	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (11 2016)
	AN ESL		61 µg/m3	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (11 2016)
Benzene, 1,1'-oxybis Vapor.	STEL	2 ppm		US. ACGIH Threshold Limit Values (03 2018)
•	TWA	1 ppm		US. ACGIH Threshold Limit Values (03 2018)
	PEL	1 ppm	7 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)
	TWA PEL	1 ppm	7 mg/m3	US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants (09 2006)
	REL	1 ppm	7 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards (2005)
	TWA	1 ppm	7 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000) (1989)
Benzene, 1,1'-oxybis-	ST ESL		70 μg/m3	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (11 2016)
	AN ESL		7 μg/m3	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (11 2016)
Benzene, 1,1'-oxybis Vapor.	TWA	1 ppm	7 mg/m3	US. Tennessee. OELs. Occupational Exposure Limits, Table Z1A (06 2008)
Benzene, 1,1'-oxybis-	ST ESL		10 ppb	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (11 2016)
	AN ESL		1 ppb	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (11 2016)
2,6-Octadienal, 3,7-dimethyl- - Inhalable fraction and vapor.	TWA	5 ppm		US. ACGIH Threshold Limit Values (01 2010)
2,6-Octadienal, 3,7-dimethyl-	ST ESL		50 ppb	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (11 2016)
	ST ESL		310 µg/m3	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (11 2016)
	AN ESL		31 µg/m3	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (11 2016)
	AN ESL		5 ppb	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (11 2016)

**Biological Limit Values** 

Chemical Identity	Exposure Limit Values	Source
2-Propanone (acetone: Sampling time: End of shift.)	25 mg/l (Urine)	ACGIH BEL (03 2015)

Appropriate Engineering Controls

No data available.



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#### Individual protection measures, such as personal protective equipment

**General information:** Provide easy access to water supply and eye wash facilities. Good general

ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. If exposure limits have not been established, maintain airborne levels

to an acceptable level.

**Eye/face protection:** Wear safety glasses with side shields (or goggles).

**Skin Protection** 

**Hand Protection:** No data available.

Other: No data available.

**Respiratory Protection:** In case of inadequate ventilation use suitable respirator. Seek advice from

local supervisor.

**Hygiene measures:** Avoid contact with eyes. Observe good industrial hygiene practices. When

using do not smoke. Do not handle until all safety precautions have been

read and understood. Obtain special instructions before use.

#### 9. Physical and chemical properties

Appearance

Physical state: liquid

Form: Spray Aerosol
Color: No data available.
Odor: No data available.
Odor threshold: No data available.
PH: No data available.
Melting point/freezing point: No data available.
Initial boiling point and boiling range: No data available.

Flash Point: -104.44 °C

**Evaporation rate:**No data available. **Flammability (solid, gas):**No data available.

Upper/lower limit on flammability or explosive limits

Flammability limit - upper (%):

Flammability limit - lower (%):

Explosive limit - upper (%):

No data available.

No data available.

No data available.

No data available.

Vapor pressure: 4,136.8544 - 4,826.3301 hPa (20 °C)

Vapor density:No data available.Density:No data available.Relative density:No data available.

Solubility(ies)

Solubility in water:No data available.Solubility (other):No data available.



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Partition coefficient (n-octanol/water): No data available.

Auto-ignition temperature:No data available.Decomposition temperature:No data available.Viscosity:No data available.

#### 10. Stability and reactivity

**Reactivity:** No data available.

**Chemical Stability:** Material is stable under normal conditions.

Possibility of hazardous

reactions:

No data available.

**Conditions to avoid:** Avoid heat or contamination.

**Incompatible Materials:** No data available.

**Hazardous Decomposition** 

Products:

No data available.

#### 11. Toxicological information

#### Information on likely routes of exposure

**Inhalation:** No data available.

**Skin Contact:** No data available.

**Eye contact:** No data available.

**Ingestion:** No data available.

#### Symptoms related to the physical, chemical and toxicological characteristics

**Inhalation:** No data available.

**Skin Contact:** No data available.

Eye contact: No data available.

**Ingestion:** No data available.

#### Information on toxicological effects

#### Acute toxicity (list all possible routes of exposure)

Oral

**Product:** Not classified for acute toxicity based on available data.



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Specified substance(s):

2-Propanone LD 50 (Rat): 5,800 mg/kg

Oils, orange, sweet LD 50: > 2,000 mg/kg

1,2-Benzenedicarboxylic

acid, 1,2-diethyl ester

LD 50 (Mouse): 2,500 mg/kg

Bicyclo[3.1.1]hept-2-ene,

2,6,6-trimethyl-

LD 50 (Rat): 3,700 mg/kg

Acetic acid, phenylmethyl

ester

LD 50 (Rat): > 2,000 mg/kg LD 50 (Mouse): > 2,000 mg/kg

LD 50 (Rat): 2,490 mg/kg

Benzene, 1,1'-oxybis- LD 50 (Rat): 2.83 g/kg

2,6-Octadienal, 3,7-

dimethyl-

LD 50 (Rat): 6,800 mg/kg

**Dermal** 

**Product:** Not classified for acute toxicity based on available data.

Specified substance(s):

2-Propanone

LD 50 (Rabbit): > 7,426 mg/kg

Oils, orange, sweet

LD 50: > 2,000 mg/kg

Bicyclo[3.1.1]hept-2-ene,

2,6,6-trimethyl-

LD 50 (Rabbit): > 2,000 mg/kg

Acetic acid, phenylmethyl

ester

LD 50 (Rabbit): > 5 g/kg

Benzene, 1,1'-oxybis-

LD 50 (Rabbit): > 7,940 mg/kg

2,6-Octadienal, 3,7-

dimethyl-

LD 50 (Rat): > 2,000 mg/kg

Inhalation

**Product:** Not classified for acute toxicity based on available data.



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Specified substance(s):

2-Propanone LC 50 (Rat): 50.1 mg/l

Propane LC 50 (Mouse): 1,237 mg/l

Butane LC 50 (Mouse): 1,237 mg/l

Oils, orange, sweet LC 50: > 5 mg/l

LC 50: > 20 mg/l

Bicyclo[3.1.1]hept-2-ene,

2,6,6-trimethyl-

LC 50: > 5 mg/l LC 50: > 20 mg/l

Acetic acid, phenylmethyl

ester

LC Lo (Rat): > 0.766 mg/l

Benzene, 1,1'-oxybis- LC 50: > 20 mg/l

Repeated dose toxicity

**Product:** No data available.

Specified substance(s):

2-Propanone NOAEL (Rat(Male), Oral, 13 Weeks): 10,000 ppm(m) Oral Experimental

result, Key study

Propane NOAEL (Rat(Female, Male), Inhalation, >= 28 d): 4,000 ppm(m) Inhalation

Experimental result, Key study

LOAEL (Rat(Female, Male), Inhalation, >= 28 d): 12,000 ppm(m) Inhalation

Experimental result, Key study

Butane NOAEL (Rat(Female, Male), Inhalation, >= 28 d): 4,000 ppm(m) Inhalation

Experimental result, Key study

LOAEL (Rat(Female, Male), Inhalation, >= 28 d): 12,000 ppm(m) Inhalation

Experimental result, Key study

1,2-Benzenedicarboxylic NOAEL (Rat(Female, Male), Oral, 6 - 16 Weeks): 150 mg/kg Oral

acid, 1,2-diethyl ester Experimental result, Key study

Bicyclo[3.1.1]hept-2-ene, NOAEL (Mouse(Female, Male), Inhalation, 14 Weeks): 50 ppm(m)

2,6,6-trimethyl- Inhalation Experimental result, Key study

Acetic acid, phenylmethyl NOAEL (Rat(Male), Oral, 13 Weeks): 900 mg/kg Oral Experimental result,

ester Supporting study

NOAEL (Rat(Female), Oral, 13 Weeks): 480 mg/kg Oral Experimental result,

Supporting study

Benzene, 1,1'-oxybis- NOAEL (Rat(Female, Male), Dermal, 13 Weeks): 100 mg/kg Dermal

Experimental result, Key study

NOAEL (Rat(Male), Oral, 13 Weeks): 301 mg/kg Oral Experimental result,

Key study

2,6-Octadienal, 3,7-

dimethyl-

LOAEL (Rat(Female, Male), Oral, 104 - 105 Weeks): 210 mg/kg Oral

Experimental result, Key study

LOAEL (Rat(Female), Oral, 14 Weeks): 335 mg/kg Oral Experimental result,

Key study

#### Skin Corrosion/Irritation



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**Product:** No data available.

Specified substance(s):

2-Propanone in vivo (Rabbit): Not irritant Experimental result, Supporting study

1.2in vivo (Rabbit): Not irritant Experimental result, Key study

Benzenedicarboxylic acid, 1,2-diethyl ester

Bicyclo[3.1.1]hept-2-In vitro (Human): Irritating Experimental result, Key study ene, 2,6,6-trimethyl-

Acetic acid. in vivo (Rabbit): Not irritant Experimental result, Key study

phenylmethyl ester

Benzene, 1,1'-oxybisin vivo (Rabbit): Not irritant Experimental result, Key study

Serious Eye Damage/Eye Irritation

Product: No data available.

Specified substance(s):

2-Propanone Irritating.

Rabbit, 24 hrs: Minimum grade of severe eye irritant

Bicyclo[3.1.1]hept-2ene, 2,6,6-trimethyl-

Rabbit, 24 - 72 hrs: Not irritating

Benzene, 1,1'-oxybis-Rabbit, 48 - 72 hrs: Irritating.

Respiratory or Skin Sensitization

Product: No data available.

Specified substance(s):

2-Propanone Skin sensitization:, in vivo (Guinea pig): Non sensitising 1,2-Skin sensitization:, in vivo (Guinea pig): Non sensitising

Benzenedicarboxylic acid, 1,2-diethyl ester

Bicyclo[3.1.1]hept-2-

Benzene, 1,1'-oxybis-

ene, 2,6,6-trimethyl-

Acetic acid.

phenylmethyl ester

Skin sensitization:, in vivo (Guinea pig): Sensitising

Skin sensitization:, in vivo (Guinea pig): Sensitising

Skin sensitization:, in vivo (Guinea pig): Non sensitising Skin sensitization:, in vivo (Human): Non sensitising

Carcinogenicity

**Product:** No data available.

IARC Monographs on the Evaluation of Carcinogenic Risks to Humans:

No carcinogenic components identified

**US. National Toxicology Program (NTP) Report on Carcinogens:** 

No carcinogenic components identified

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050):

No carcinogenic components identified



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#### **Germ Cell Mutagenicity**

In vitro

**Product:** No data available.

In vivo

**Product:** No data available.

Reproductive toxicity

**Product:** No data available.

**Specific Target Organ Toxicity - Single Exposure** 

**Product:** No data available.

Specified substance(s):

2-Propanone Inhalation - vapor: Narcotic effect. - Category 3 with narcotic effects.

**Specific Target Organ Toxicity - Repeated Exposure** 

**Product:** No data available.

**Target Organs** 

Specific Target Organ Toxicity - Single Exposure: Narcotic effect.

**Aspiration Hazard** 

**Product:** No data available.

Specified substance(s):

Oils, orange, sweet May be fatal if swallowed and enters airways. Bicyclo[3.1.1]hept-2-ene, May be fatal if swallowed and enters airways.

2,6,6-trimethyl-

Other effects: No data available.

#### 12. Ecological information

#### **Ecotoxicity:**

#### Acute hazards to the aquatic environment:

**Fish** 

**Product:** No data available.

Specified substance(s):

2-Propanone LC 50 (Oncorhynchus mykiss, 96 h): 5,540 mg/l Experimental result, Key

study

Propane LC 50 (Various, 96 h): 147.54 mg/l QSAR QSAR, Key study

Butane LC 50 (Various, 96 h): 147.54 mg/l QSAR QSAR, Key study

Oils, orange, sweet LC 50 (96 h): < 1 mg/l



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1,2-Benzenedicarboxylic NOAEL (Oncorhynchus mykiss, 96 h): 1.9 mg/l Experimental result, Key acid, 1,2-diethyl ester study LC 50 (Oncorhynchus mykiss, 96 h): 12 mg/l Experimental result, Key study LC 50 (Western mosquitofish (Gambusia affinis), 96 h): 65 mg/l Mortality Acetic acid, pentyl ester EC 50 (Pimephales promelas, 96 h): 179 µg/l Read-across from supporting Bicyclo[3.1.1]hept-2-ene, 2,6,6-trimethylsubstance (structural analogue or surrogate), Supporting study Acetic acid, phenylmethyl LC 50 (Medaka, high-eyes (Oryzias latipes), 96 h): 3.48 - 4.6 mg/l Mortality ester LC 50 (Orvzias latipes, 96 h): 4 mg/l Other, Kev study Benzene, 1,1'-oxybis-LC 50 (Oncorhynchus mykiss, 96 h): 4.2 mg/l Experimental result, Key study 2,6-Octadienal, 3,7-LC 50 (Leuciscus idus, 96 h): 6.78 mg/l Experimental result, Key study

Aquatic Invertebrates

dimethyl-

**Product:** No data available.

Specified substance(s):

2-Propanone LC 50 (Daphnia pulex, 48 h): 8,800 mg/l Experimental result, Key study

Butane LC 50 (Daphnia sp., 48 h): 69.43 mg/l QSAR QSAR, Key study

1,2-Benzenedicarboxylic NOAEL (Daphnia magna, 48 h): 43 mg/l Experimental result, Key study acid, 1,2-diethyl ester LC 50 (Daphnia magna, 48 h): 90 mg/l Experimental result, Key study

Acetic acid, pentyl ester LC 50 (Water flea (Daphnia magna), 24 h): 210 mg/l Mortality

Bicyclo[3.1.1]hept-2-ene, LC 50 (Water flea (Daphnia magna), 48 h): 27 - 62 mg/l Mortality 2,6,6-trimethyl-

Acetic acid, phenylmethyl ester EC 50 (Daphnia magna, 24 h): 25 mg/l Experimental result, Key study EC 50 (Daphnia magna, 48 h): 17 mg/l Experimental result, Key study NOAEL (Daphnia magna, 48 h): 10 mg/l Experimental result, Key study

Benzene, 1,1'-oxybis-LC 50 (Daphnia magna, 48 h): 1.7 mg/l Experimental result, Key study NOAEL (Daphnia magna, 48 h): 1 mg/l Experimental result, Key study

2,6-Octadienal, 3,7- EC 50 (Daphnia magna, 48 h): 6.8 mg/l Experimental result, Key study dimethyl-

#### Chronic hazards to the aquatic environment:

Fish

**Product:** No data available.

**Aquatic Invertebrates** 

**Product:** No data available.

Specified substance(s):

2-Propanone LOAEL (Daphnia magna): 2,212 mg/l Experimental result, Key study

NOAEL (Daphnia magna): 2,212 mg/l Experimental result, Key study

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1,2-Benzenedicarboxylic NOAEL (Daphnia magna): 25 mg/l Experimental result, Key study acid, 1,2-diethyl ester



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**Toxicity to Aquatic Plants** 

Product: No data available.

#### Persistence and Degradability

**Biodegradation** 

Product: No data available.

Specified substance(s):

2-Propanone 90.9 % (28 d) Detected in water. Experimental result. Key study

Propane 100 % (385.5 h) Detected in water. Experimental result, Key study

50 % (3.19 d) Detected in water. QSAR, Weight of Evidence study

Butane 100 % (385.5 h) Detected in water. Experimental result, Key study

50 % (3.19 d) Detected in water. QSAR, Weight of Evidence study

Oils, orange, sweet < 70 % (10 d, Assessment)

1,2-Benzenedicarboxylic acid, 1,2-diethyl ester

94.6 % (28 d) Detected in water. Experimental result, Key study

Bicyclo[3.1.1]hept-2-ene,

2,6,6-trimethyl-

90 - 95 % (28 d) Detected in water. Experimental result, Supporting study

Acetic acid, phenylmethyl

ester

100 % (28 d) Detected in water. Experimental result, Key study

Benzene, 1,1'-oxybis-76 % Detected in water. Experimental result, Key study

2,6-Octadienal, 3,7-

dimethyl-

85 - 95 % (28 d) Detected in water. Experimental result, Key study

**BOD/COD Ratio** 

Product: No data available.

#### Bioaccumulative potential

**Bioconcentration Factor (BCF)** 

Product: No data available.

Specified substance(s):

2-Propanone Haddock, adult, Bioconcentration Factor (BCF): 0.69 Aguatic sediment

Experimental result, Not specified

1,2-Benzenedicarboxylic acid, 1,2-diethyl ester

Bluegill (Lepomis macrochirus), Bioconcentration Factor (BCF): 117 (Flow

through)

Bicyclo[3.1.1]hept-2-ene,

2,6,6-trimethyl-

Bioconcentration Factor (BCF): 1,845 Aquatic sediment QSAR, Key study

Acetic acid, phenylmethyl

ester

Bioconcentration Factor (BCF): 8 Aquatic sediment Estimated by calculation,

Key study

Benzene, 1,1'-oxybis-Oncorhynchus mykiss, Bioconcentration Factor (BCF): 200 Aquatic sediment

Experimental result, Key study



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2,6-Octadienal, 3,7- Bioconcentration Factor (BCF): 89.72 Aquatic sediment Estimated by

dimethyl- calculation, Key study

Partition Coefficient n-octanol / water (log Kow)

**Product:** No data available.

Mobility in soil: No data available.

Known or predicted distribution to environmental compartments

No data available.

2-Propanone No data available.
Propane No data available.
Butane No data available.
Oils, orange, sweet No data available.
1,2-Benzenedicarboxylic No data available.

acid, 1,2-diethyl ester

Acetic acid, pentyl ester No data available. Bicyclo[3.1.1]hept-2-ene, No data available.

2,6,6-trimethyl-

Acetic acid, phenylmethyl

ester

Benzene, 1,1'-oxybis-2,6-Octadienal, 3,7-No data available.

dimethyl-

Other adverse effects: No data available.

13. Disposal considerations

**Disposal instructions:** Discharge, treatment, or disposal may be subject to national, state, or local

laws.

Contaminated Packaging: No data available.

#### 14. Transport information

#### DOT

UN Number: UN 1950

UN Proper Shipping Name: Aerosols, flammable

Transport Hazard Class(es)

Class: 2.1
Label(s): Packing Group: II
Marine Pollutant: No

Environmental Hazards: No Marine Pollutant No



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Special precautions for user: Not regulated.

**IMDG** 

UN Number: UN 1950

UN Proper Shipping Name: Aerosols, flammable

Transport Hazard Class(es)

Class: 2
Label(s): –
EmS No.:

Packing Group: -

Environmental Hazards: No Marine Pollutant No

Special precautions for user: Not regulated.

**IATA** 

UN Number: UN 1950

Proper Shipping Name: Aerosols, flammable

Transport Hazard Class(es):

Class: 2.1
Label(s): –

Packing Group: –

Environmental Hazards: No Marine Pollutant No

Special precautions for user: Not regulated.

#### 15. Regulatory information

**US Federal Regulations** 

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)
US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

None present or none present in regulated quantities.

#### CERCLA Hazardous Substance List (40 CFR 302.4):

Chemical Identity	Reportable quantity
2-Propanone	lbs. 5000
Propane	lbs. 100
Butane	lbs. 100
1,2-Benzenedicarboxylic	lbs. 1000
acid, 1,2-diethyl ester	
Acetic acid, pentyl ester	lbs. 5000
Bicyclo[3.1.1]hept-2-ene,	lbs. 100
2,6,6-trimethyl-	

#### Superfund Amendments and Reauthorization Act of 1986 (SARA)

#### **Hazard categories**

Fire Hazard

Immediate (Acute) Health Hazards

Flammable aerosol

Serious Eye Damage/Eye Irritation

Specific Target Organ Toxicity - Single Exposure



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#### **SARA 302 Extremely Hazardous Substance**

**Reportable** 

<u>Chemical Identity</u> <u>quantity</u> <u>Threshold Planning Quantity</u>

2-Propanone

#### **SARA 304 Emergency Release Notification**

Reportable quantity
lbs. 5000
lbs. 100
lbs. 100
lbs. 1000
lbs. 5000
lbs. 100

#### SARA 311/312 Hazardous Chemical

Chemical Identity	Threshold Planning Quantity
2-Propanone	10000 lbs
Propane	10000 lbs
Butane	10000 lbs
Oils, orange, sweet	10000 lbs
1,2-Benzenedicarboxylic	10000 lbs
acid, 1,2-diethyl ester	
Acetic acid, pentyl ester	10000 lbs
Bicyclo[3.1.1]hept-2-ene,	10000 lbs
2,6,6-trimethyl-	
Acetic acid, phenylmethyl	10000 lbs
ester	
Benzene, 1,1'-oxybis-	10000 lbs
2,6-Octadienal, 3,7-	10000 lbs
dimethyl-	

#### SARA 313 (TRI Reporting)

None present or none present in regulated quantities.

# Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130): Clean Water Act Section 311 Hazardous Substances (40 CFR 117.3) US State Regulations

#### **US. California Proposition 65**

This product contains chemical(s) known to the State of California to cause cancer and/or to cause birth defects or other reproductive harm.

Methanone, diphenyl- Carcinogenic. 07 2012

#### US. New Jersey Worker and Community Right-to-Know Act

#### **Chemical Identity**

2-Propanone Propane Butane

#### **US. Massachusetts RTK - Substance List**

No ingredient regulated by MA Right-to-Know Law present.



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#### US. Pennsylvania RTK - Hazardous Substances

## Chemical Identity 2-Propanone

Propane

Butane

#### US. Rhode Island RTK

No ingredient regulated by RI Right-to-Know Law present.

#### International regulations

#### Montreal protocol

Not applicable

#### Stockholm convention

Not applicable

#### **Rotterdam convention**

Not applicable

#### **Kyoto protocol**

Not applicable



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**Inventory Status:** 

Australia AICS: Not in compliance with the inventory.

Canada DSL Inventory List: Not in compliance with the inventory.

EINECS, ELINCS or NLP: Not in compliance with the inventory.

Japan (ENCS) List: Not in compliance with the inventory.

China Inv. Existing Chemical Substances: Not in compliance with the inventory.

Korea Existing Chemicals Inv. (KECI): Not in compliance with the inventory.

Canada NDSL Inventory: Not in compliance with the inventory.

Philippines PICCS: Not in compliance with the inventory.

US TSCA Inventory: Not in compliance with the inventory.

New Zealand Inventory of Chemicals: Not in compliance with the inventory.

Japan ISHL Listing: Not in compliance with the inventory.

Japan Pharmacopoeia Listing: Not in compliance with the inventory.

Mexico INSQ: Not in compliance with the inventory.

Ontario Inventory: Not in compliance with the inventory.

Taiwan Chemical Substance Inventory: Not in compliance with the inventory.

#### 16.Other information, including date of preparation or last revision

**Issue Date:** 06/12/2019

**Revision Information:** No data available.

Version #: 1.0

Further Information: No data available.

**Disclaimer:** This information is provided without warranty. The information is believed to

be correct. This information should be used to make an independent determination of the methods to safeguard workers and the environment.