



VELTEK ASSOCIATES, INC.

# DECON-CYCLE®. Also known as: DECON-CYCLE® II

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

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### SECTION 1: Identification

#### 1.1. Identification

Product form : Mixture  
Product name : DECON-CYCLE®. Also known as: DECON-CYCLE® II  
Product code : SDS DCY-98-01

#### 1.2. Recommended use and restrictions on use

Use of the substance/mixture : Disinfectant

#### 1.3. Supplier

Veltek Associates, Inc.  
15 Lee Blvd  
Malvern, PA 19355-1234 USA  
Telephone: +1 610-644-8335 - Fax: +1 610-644-8336  
E-mail: vai@sterile.com

In Canada distributed by:  
Canada Clean Room (CCR)  
200 Terence Matthews  
Kanata, ONT K2M 2C6, Canada  
Telephone: 888-595-8070

#### 1.4. Emergency telephone number

Emergency number : CARECHEM 24: 1-215-207-0061  
1-866-928-0789 (toll free)  
Canada: 1-800-579-7421 (toll free)  
Mexico: +52-55-5004-8763

### SECTION 2: Hazard(s) identification

#### 2.1. Classification of the substance or mixture

##### GHS US classification

Flammable liquids Category 3	H226 Flammable liquid and vapor
Skin corrosion/irritation Category 1C	H314 Causes severe skin burns and eye damage
Serious eye damage/eye irritation Category 1	H318 Causes serious eye damage
Skin sensitization, Category 1	H317 May cause an allergic skin reaction
Carcinogenicity Category 2	H351 Suspected of causing cancer
Reproductive toxicity Category 2	H361 Suspected of damaging fertility or the unborn child
Specific target organ toxicity (repeated exposure) Category 2	H373 May cause damage to organs (kidneys) through prolonged or repeated exposure
Hazardous to the aquatic environment - Acute Hazard Category 2	H401 Toxic to aquatic life
Hazardous to the aquatic environment - Chronic Hazard Category 1	H410 Very toxic to aquatic life with long lasting effects

Full text of H statements : see section 16

#### 2.2. GHS Label elements, including precautionary statements

##### GHS US labeling

Hazard pictograms (GHS US) :



Signal word (GHS US) :

Danger

Hazard statements (GHS US) :

H226 - Flammable liquid and vapor  
H314 - Causes severe skin burns and eye damage  
H317 - May cause an allergic skin reaction  
H318 - Causes serious eye damage

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Precautionary statements (GHS US)	<p>H351 - Suspected of causing cancer H361 - Suspected of damaging fertility or the unborn child H373 - May cause damage to organs (kidneys) through prolonged or repeated exposure H401 - Toxic to aquatic life H410 - Very toxic to aquatic life with long lasting effects</p> <p>: P201 - Obtain special instructions before use. P202 - Do not handle until all safety precautions have been read and understood. P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P233 - Keep container tightly closed. P240 - Ground/Bond container and receiving equipment P241 - Use explosion-proof electrical, lighting, ventilating equipment P242 - Use only non-sparking tools. P243 - Take precautionary measures against static discharge. P260 - Do not breathe vapors. P264 - Wash hands thoroughly after handling. P272 - Contaminated work clothing should not be allowed out of the workplace. P273 - Avoid release to the environment. P280 - Wear eye protection; protective gloves; protective clothing. P301+P330+P331 - If swallowed: rinse mouth. Do NOT induce vomiting P303+P361+P353 - If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower P304+P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing. P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing P310 - Immediately call a doctor P363 - Wash contaminated clothing before reuse. P370+P378 - In case of fire: Use foam, Dry powder, carbon dioxide (CO<sub>2</sub>), Water spray to extinguish. P391 - Collect spillage. P403+P235 - Store in a well-ventilated place. Keep cool. P405 - Store locked up. P501 - Dispose of contents/container to an authorized waste collection point</p>
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### 2.3. Other hazards which do not result in classification

No additional information available

### 2.4. Unknown acute toxicity (GHS US)

Not applicable

## SECTION 3: Composition/Information on ingredients

### 3.1. Substances

Not applicable

### 3.2. Mixtures

Name	Product identifier	%	GHS US classification
2-methylpentane-2,4-diol (hexylene glycol)	(CAS-No.) 107-41-5	10 - < 30	Skin Irrit. 2, H315 Eye Irrit. 2A, H319
Citric acid	(CAS-No.) 77-92-9	10 - < 30	Eye Irrit. 2A, H319
Isopropanol	(CAS-No.) 67-63-0	7 - < 13	Flam. Liq. 2, H225 Eye Irrit. 2A, H319 STOT SE 3, H336
Biphenyl-2-ol (ortho-phenylphenol)	(CAS-No.) 90-43-7	5 - < 10	Skin Irrit. 2, H315 Eye Dam. 1, H318 STOT SE 3, H335 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
Clorofene (ortho-benzyl-para-chlorophenol)	(CAS-No.) 120-32-1	5 - < 10	Acute Tox. 4 (Inhalation), H332 Skin Irrit. 2, H315 Eye Dam. 1, H318 Skin Sens. 1, H317 Carc. 2, H351 Repr. 2, H361 STOT RE 2, H373 Aquatic Acute 1, H400 Aquatic Chronic 1, H410 (M = 100)
Dodecylbenzenesulfonic acid	(CAS-No.) 27176-87-0	1 - < 5	Acute Tox. 4 (Oral), H302 Skin Corr. 1B, H314 Eye Dam. 1, H318
2,2',2''-nitilotriethanol	(CAS-No.) 102-71-6	1 - < 5	Not classified
Benzenesulfonic acid, C10-16-alkyl derivs.	(CAS-No.) 68584-22-5	1 - < 5	Eye Irrit. 2A, H319

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\*Chemical name, CAS number and/or exact concentration have been withheld as a trade secret

Full text of hazard classes and H-statements : see section 16

### SECTION 4: First-aid measures

#### 4.1. Description of first aid measures

- |                                       |   |
|---------------------------------------|---|
| First-aid measures general            | : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).   |
| First-aid measures after inhalation   | : Remove person to fresh air and keep at rest in a position comfortable for breathing. If symptoms develop obtain medical attention.  |
| First-aid measures after skin contact | : Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse. Obtain immediate medical attention.   |
| First-aid measures after eye contact  | : Rinse immediately with plenty of water (for at least 15 minutes). Ensure that folded skin of eyelids is thoroughly washed with water. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain immediate medical attention. |
| First-aid measures after ingestion    | : Do NOT induce vomiting. Do not give an unconscious person anything to drink. Wash out mouth with water and give 100-200 ml of water to drink. Obtain immediate medical attention.   |

#### 4.2. Most important symptoms and effects (acute and delayed)

- |                                     |   |
|-------------------------------------|---|
| Symptoms/effects after inhalation   | : At high concentrations, the vapors can be irritating to the respiratory system. |
| Symptoms/effects after skin contact | : Causes burns. May cause an allergic skin reaction. Skin rash/inflammation.      |
| Symptoms/effects after eye contact  | : Causes serious eye damage.  |
| Symptoms/effects after ingestion    | : Severe irritation or burns to the mouth, throat, esophagus, and stomach.        |

#### 4.3. Immediate medical attention and special treatment, if necessary

Treat symptomatically.

### SECTION 5: Fire-fighting measures

#### 5.1. Suitable (and unsuitable) extinguishing media

- |                                |  |
|--------------------------------|--|
| Suitable extinguishing media   | : Foam. Dry powder. Carbon dioxide. Water spray. |
| Unsuitable extinguishing media | : Do not use a heavy water stream.               |

#### 5.2. Specific hazards arising from the chemical

- |                  |  |
|------------------|--|
| Fire hazard      | : Flammable liquid and vapor. Vapors are heavier than air and may travel considerable distance to an ignition source and flash back to source of vapors. |
| Explosion hazard | : Containers may rupture when heated.  |

#### 5.3. Special protective equipment and precautions for fire-fighters

- |                                |   |
|--------------------------------|---|
| Firefighting instructions      | : Exercise caution when fighting any chemical fire. Use water spray or fog for cooling exposed containers. Prevent fire-fighting water from entering environment.       |
| Protection during firefighting | : Do not enter fire area without proper protective equipment, including respiratory protection. Use self-contained breathing apparatus when in close proximity to fire. |

### SECTION 6: Accidental release measures

#### 6.1. Personal precautions, protective equipment and emergency procedures

##### 6.1.1. For non-emergency personnel

- |                      |   |
|----------------------|---|
| Emergency procedures | : Remove all sources of ignition. Ventilate area. Do not breathe vapors. Do not get in eyes, on skin, or on clothing. Evacuate unnecessary personnel. |
|----------------------|---|

##### 6.1.2. For emergency responders

- |                      |   |
|----------------------|---|
| Protective equipment | : Equip cleanup crew with proper protection. Use chemically protective clothing.  |
| Emergency procedures | : Remove ignition sources. Use only non-sparking tools. Take precautionary measures against static discharge. Ventilate area. Do not breathe vapors. Do not get in eyes, on skin, or on clothing. |

#### 6.2. Environmental precautions

Collect spillage. Prevent entry to sewers and public waters. Notify authorities if large amounts of the product enters sewers or public waters.

#### 6.3. Methods and material for containment and cleaning up

- |                         |  |
|-------------------------|--|
| Methods for cleaning up | : Use non-sparking tools. Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal. |
|-------------------------|--|

#### 6.4. Reference to other sections

SECTION 8: Exposure controls/personal protection. SECTION 13: Disposal considerations.

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### SECTION 7: Handling and storage

#### 7.1. Precautions for safe handling

- Precautions for safe handling : Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Ground/bond container and receiving equipment. Take precautionary measures against static discharge. Use only non-sparking tools. Use only outdoors or in a well-ventilated area. Provide good ventilation in process area to prevent formation of vapor. Do not breathe vapors. Do not get in eyes, on skin, or on clothing.
- Hygiene measures : Handle in accordance with good industrial hygiene and safety practice. Do not eat, drink or smoke when using this product. Take off immediately all contaminated clothing and wash it before reuse. Contaminated work clothing should not be allowed out of the workplace. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

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

- Storage conditions : Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Protect material from direct sunlight. Store in original container. Keep container tightly closed. Store in a well-ventilated place. Keep cool. Store locked up.
- Incompatible materials : Oxidizing agents. Reducing agents. Strong alkalis. Strong acids.

### SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

##### 2-methylpentane-2,4-diol (hexylene glycol) (107-41-5)

###### USA - ACGIH - Occupational Exposure Limits

Local name	Hexylene glycol
ACGIH TWA (ppm)	25 ppm
ACGIH STEL (mg/m <sup>3</sup> )	10 mg/m <sup>3</sup>
ACGIH STEL (ppm)	50 ppm
Remark (ACGIH)	Eye & URT irr
Regulatory reference	ACGIH 2019

##### Isopropanol (67-63-0)

###### USA - ACGIH - Occupational Exposure Limits

Local name	2-Propanol
ACGIH TWA (ppm)	200 ppm
ACGIH STEL (ppm)	400 ppm
Remark (ACGIH)	Eye & URT irr; CNS impair
Regulatory reference	ACGIH 2019

###### USA - ACGIH - Biological Exposure Indices

Local name	2-PROPANOL
Biological Exposure Indices (BEI)	40 mg/l Parameter: Acetone - Medium: urine - Sampling time: End of shift at end of workweek - Notations: B, Ns
Regulatory reference	ACGIH 2019

###### USA - OSHA - Occupational Exposure Limits

Local name	Isopropyl alcohol
OSHA PEL (TWA) (mg/m <sup>3</sup> )	980 mg/m <sup>3</sup>
OSHA PEL (TWA) (ppm)	400 ppm
Regulatory reference (US-OSHA)	OSHA Annotated Table Z-1

##### 2,2',2"-nitrilotriethanol (102-71-6)

###### USA - ACGIH - Occupational Exposure Limits

Local name	Triethanolamine
ACGIH TWA (mg/m <sup>3</sup> )	5 mg/m <sup>3</sup>
Remark (ACGIH)	Eye & skin irr
Regulatory reference	ACGIH 2019

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### 8.2. Appropriate engineering controls

- Appropriate engineering controls : Provide adequate ventilation, including appropriate local extraction, to ensure that occupational exposure limits are not exceeded. Provide good ventilation in process area to prevent formation of vapor. Emergency eye wash fountains should be available in the immediate vicinity of any potential exposure.
- Environmental exposure controls : Avoid release to the environment.

### 8.3. Individual protection measures/Personal protective equipment

#### Personal protective equipment:

Avoid all unnecessary exposure.

#### Hand protection:

Wear suitable gloves resistant to chemical penetration. Gloves should be removed and replaced if there are any signs of degradation or breakthrough. The exact breakthrough time has to be found out by the manufacturer of the protective gloves and has to be observed.

#### Eye protection:

Chemical goggles or safety glasses

#### Skin and body protection:

Wear chemically protective gloves, lab coat or apron to prevent prolonged or repeated skin contact

#### Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment.

#### Thermal hazard protection:

Not required for normal conditions of use.

#### Other information:

Do not eat, drink or smoke during use.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Appearance	: Clear.
Color	: Amber
Odor	: Alcohol
Odor threshold	: No data available
pH	: 1.5 - 2.5 Concentrate
Melting point	: No data available
Freezing point	: No data available
Boiling point	: 100 °C
Flash point	: 41.6 °C
Relative evaporation rate (butyl acetate=1)	: No data available
Flammability (solid, gas)	: Not applicable.
Vapor pressure	: No data available
Relative vapor density at 20 °C	: No data available
Relative density	: 1.092 +/-0.01 (25 °C) (Water = 1)
Solubility	: Water: Miscible
Log Pow	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosion limits	: No data available
Explosive properties	: Vapors may form explosive mixture with air.
Oxidizing properties	: Not oxidizing.

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### 9.2. Other information

No additional information available

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

Stable under recommended handling and storage conditions (see section 7).

### 10.2. Chemical stability

Stable under recommended handling and storage conditions (see section 7).

### 10.3. Possibility of hazardous reactions

Under fire conditions closed containers may rupture or explode.

### 10.4. Conditions to avoid

Keep away from open flames, hot surfaces and sources of ignition. Extremely high or low temperatures. Direct sunlight.

### 10.5. Incompatible materials

Oxidizing agents. Reducing agents. Strong alkalis. Strong acids.

### 10.6. Hazardous decomposition products

Fire may produce irritating, corrosive and/or toxic gases. Carbon monoxide. Carbon dioxide. Chlorine. Hydrocarbons.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

Acute toxicity (oral) : Not classified  
Acute toxicity (dermal) : Not classified  
Acute toxicity (inhalation) : Not classified

<b>2-methylpentane-2,4-diol (hexylene glycol) (107-41-5)</b>	
LD50 oral, rat	> 2000 mg/kg
LD50 dermal, rabbit	> 2000 mg/kg
LC50 inhalation, rat (mg/l)	> 60 ml/m <sup>3</sup> - 8 Hours
<b>Isopropanol (67-63-0)</b>	
LD50 oral, rat	5840 mg/kg
LD50 dermal, rat	16.4 ml/kg
LC50 inhalation, rat (ppm)	> 10000 ppm - 6 Hours
<b>Citric acid (77-92-9)</b>	
LD50 oral, rat	5400 mg/kg
LD50 dermal, rat	> 2000 mg/kg
<b>Biphenyl-2-ol (ortho-phenylphenol) (90-43-7)</b>	
LD50 oral, rat	2733 mg/kg
LD50 dermal, rabbit	> 2000 mg/kg
LC50 inhalation, rat (mg/l)	> 949 mg/m <sup>3</sup> - 1 Hours
<b>Clorofene (ortho-benzyl-para-chlorophenol) (120-32-1)</b>	
LD50 oral, rat	4147 mg/kg (OECD 401 method)
LD50 dermal, rat	> 2000 mg/kg (OECD 402 method)
LC50 inhalation, rat (mg/l)	2.5 mg/l - 4 Hours (OECD 403 method)
<b>Dodecylbenzenesulfonic acid (27176-87-0)</b>	
LD50 oral, rat	650 mg/kg
LD50 dermal, rat	> 2000 mg/kg (OECD 402 method)
LC50 inhalation, rat (mg/l)	310 mg/m <sup>3</sup> - 4 Hours
<b>2,2',2"-nitrilotriethanol (102-71-6)</b>	
LD50 oral, rat	6400 mg/kg (OECD 401 method)
LD50 dermal, rat	> 2000 mg/kg (OECD 402 method)

Skin corrosion/irritation : Causes severe skin burns and eye damage.  
pH: 1.5 - 2.5 Concentrate

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Serious eye damage/irritation	: Causes serious eye damage. pH: 1.5 - 2.5 Concentrate
Respiratory or skin sensitization	: May cause an allergic skin reaction.
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Suspected of causing cancer.

<b>Isopropanol (67-63-0)</b>	
IARC group	3 - Not classifiable

<b>Biphenyl-2-ol (ortho-phenylphenol) (90-43-7)</b>	
IARC group	3 - Not classifiable

<b>2,2',2''-nitrioltriethanol (102-71-6)</b>	
IARC group	3 - Not classifiable

Reproductive toxicity	: Suspected of damaging fertility or the unborn child.
Specific target organ toxicity – single exposure	: Not classified

<b>Isopropanol (67-63-0)</b>	
Specific target organ toxicity – single exposure	May cause drowsiness or dizziness.

<b>Biphenyl-2-ol (ortho-phenylphenol) (90-43-7)</b>	
Specific target organ toxicity – single exposure	May cause respiratory irritation.

Specific target organ toxicity – repeated exposure	: May cause damage to organs (kidneys) through prolonged or repeated exposure.
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<b>Clorofene (ortho-benzyl-para-chlorophenol) (120-32-1)</b>	
Specific target organ toxicity – repeated exposure	May cause damage to organs (kidneys) through prolonged or repeated exposure.

Aspiration hazard	: Not classified
Viscosity, kinematic	: No data available
Symptoms/effects after inhalation	: At high concentrations, the vapors can be irritating to the respiratory system.
Symptoms/effects after skin contact	: Causes burns. May cause an allergic skin reaction. Skin rash/inflammation.
Symptoms/effects after eye contact	: Causes serious eye damage.
Symptoms/effects after ingestion	: Severe irritation or burns to the mouth, throat, esophagus, and stomach.

## SECTION 12: Ecological information

### 12.1. Toxicity

<b>2-methylpentane-2,4-diol (hexylene glycol) (107-41-5)</b>	
LC50 fish	10000 mg/l 96 Hours - <i>Lepomis macrochirus</i>
EC50 Daphnia	2700 - 3700 mg/l 48 Hours - <i>Daphnia magna</i>

<b>Isopropanol (67-63-0)</b>	
LC50 fish	9640 mg/l - 96 Hours ( <i>Pimephales promelas</i> )
EC50 Daphnia	> 10000 mg/l - 48 Hours ( <i>Daphnia magna</i> )
NOEC chronic algae	1800 mg/l - 7 days ( <i>Scenedesmus quadricauda</i> )

<b>Citric acid (77-92-9)</b>	
LC50 fish	440 - 760 mg/l 48 Hours - <i>Leuciscus idus melanotus</i>
EC50 Daphnia	1535 mg/l 24 Hours - <i>Daphnia magna</i>

<b>Biphenyl-2-ol (ortho-phenylphenol) (90-43-7)</b>	
LC50 fish	4.5 mg/l - 96 Hours ( <i>Danio rerio</i> )
EC50 Daphnia	2.7 mg/l - 48 Hours ( <i>Daphnia magna</i> , Mobility)
ErC50 (algae)	3.57 mg/l - 72 Hours ( <i>Pseudokirchneriella subcapitata</i> , Growth rate), (OECD 201 method)
NOEC (chronic)	0.009 mg/l - 21 days ( <i>Daphnia magna</i> , reproduction), (OECD 211 method)
NOEC chronic fish	0.036 mg/l - 21 days ( <i>Pimephales promelas</i> , reproduction)

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<b>Biphenyl-2-ol (ortho-phenylphenol) (90-43-7)</b>	
NOEC chronic algae	0.468 mg/l - 72 Hours (Pseudokirchneriella subcapitata, Growth rate), (OECD 201 method)
<b>Clorofene (ortho-benzyl-para-chlorophenol) (120-32-1)</b>	
LC50 fish	1.5 mg/l - 96 Hours (Danio rerio)
EC50 Daphnia	0.655 mg/l - 48 Hours (Daphnia magna)(OECD 202 method)
EC50 other aquatic organisms 1	0.089 mg/l - 96 Hours (Americamysis bahia)(EPA OPPTS 850.1035)
ErC50 (algae)	0.435 mg/l - 72 Hours (Navicula pelliculosa, Growth rate)(OCSPP 850.4500)
ErC50 (other aquatic plants)	0.155 mg/l - 96 Hours (Skeletonema costatum, Growth rate)((OECD 201 method)
NOEC chronic fish	< 0.0095 mg/l - 30 days (Danio rerio) (OECD 210 method)
NOEC chronic crustacea	0.0067 mg/l - 21 days (Daphnia magna, reproduction)
<b>Dodecylbenzenesulfonic acid (27176-87-0)</b>	
LC50 fish	8.929 mg/l - 96 Hours (freshwater fish)(QSAR, EPI Suite v4.1/ECOSAR v1.00)
EC50 Daphnia	3.5 mg/l - 48 Hours (Daphnia magna)
LC50 fish 2	10.046 mg/l - 96 Hours (marine water fish)(QSAR, EPI Suite v4.1/ECOSAR v1.00)
EC50 Daphnia 2	4.58 mg/l - 48 Hours (Tisbe bulbisetosa)
ErC50 (algae)	65.4 mg/l - 72 Hours (Pseudokirchneriella subcapitata, Growth rate)(OECD 201 method)
NOEC chronic fish	1.21 mg/l - 30 days (freshwater fish)(QSAR, EPI Suite v4.1/ECOSAR v1.00)
<b>2,2',2"-nitrioltriethanol (102-71-6)</b>	
LC50 fish	11800 mg/l - 96 Hours (Pimephales promelas)(APHA)
EC50 Daphnia	609.88 mg/l - 96 Hours (Ceriodaphnia dubia)(ASTM E1192)
NOEC (acute)	16 mg/l 21 days - Daphnia magna
NOEC chronic crustacea	16 mg/l - 21 days (Daphnia magna)

### 12.2. Persistence and degradability

<b>DECON-CYCLE®. Also known as: DECON-CYCLE® II</b>	
Persistence and degradability	Readily biodegradable.
Biodegradation	74 % - 28 days
<b>Isopropanol (67-63-0)</b>	
Persistence and degradability	Expected to be readily biodegradable.
<b>Biphenyl-2-ol (ortho-phenylphenol) (90-43-7)</b>	
Persistence and degradability	Readily biodegradable.
Biodegradation	70.8 - 75.7 % - 28 days (OECD 301B method)
<b>Clorofene (ortho-benzyl-para-chlorophenol) (120-32-1)</b>	
Persistence and degradability	Inherently biodegradable. Not readily biodegradable.
<b>Dodecylbenzenesulfonic acid (27176-87-0)</b>	
Persistence and degradability	Readily biodegradable.

### 12.3. Bioaccumulative potential

<b>DECON-CYCLE®. Also known as: DECON-CYCLE® II</b>	
Bioaccumulative potential	No information available.
<b>Isopropanol (67-63-0)</b>	
Bioconcentration factor (BCF REACH)	3
Log Pow	0.05
<b>Biphenyl-2-ol (ortho-phenylphenol) (90-43-7)</b>	
BCF fish 1	21.7 (Danio rerio)
Log Pow	3.18 (22.5 °C)(OECD 107 method)
Bioaccumulative potential	Not expected to bioaccumulate.
<b>Clorofene (ortho-benzyl-para-chlorophenol) (120-32-1)</b>	
Log Pow	4.276 (25 °C)
Bioaccumulative potential	Not expected to bioaccumulate.
<b>Dodecylbenzenesulfonic acid (27176-87-0)</b>	
Bioaccumulative potential	Not expected to bioaccumulate.



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### 12.4. Mobility in soil

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Ecology - soil : Miscible with water.

#### Biphenyl-2-ol (ortho-phenylphenol) (90-43-7)

Log Koc : 2.4 - 2.6 (20 °C)

### 12.5. Other adverse effects

Other information : Avoid release to the environment.

## SECTION 13: Disposal considerations

### 13.1. Disposal methods

Waste treatment methods : Dispose of this material and its container at hazardous or special waste collection point.  
Waste disposal recommendations : Dispose in a safe manner in accordance with local/national regulations.  
Additional information : Handle empty containers with care because residual vapors are flammable. Empty containers should be taken for recycling, recovery or waste in accordance with local regulation.  
Ecology - waste materials : Avoid release to the environment. Hazardous waste due to toxicity.

## SECTION 14: Transport information

### Department of Transportation (DOT)

In accordance with DOT

Transport document description : UN2924 Flammable liquids, corrosive, n.o.s. (Isopropanol ; Citric acid), 3 (8), III  
UN-No.(DOT) : UN2924  
Proper Shipping Name (DOT) : Flammable liquids, corrosive, n.o.s. (Isopropanol ; Citric acid)  
Transport hazard class(es) (DOT) : 3 - Class 3 - Flammable and combustible liquid 49 CFR 173.120  
Packing group (DOT) : III - Minor Danger  
Subsidiary risk (DOT) : 8 - Class 8 - Corrosive material 49 CFR 173.136  
Hazard labels (DOT) : 3 - Flammable liquid  
8 - Corrosive



Dangerous for the environment : Yes  
Marine pollutant : Yes



DOT Packaging Non Bulk (49 CFR 173.xxx) : 203  
DOT Packaging Bulk (49 CFR 173.xxx) : 242  
DOT Symbols : G  
DOT Special Provisions (49 CFR 172.102) : B1, IB3, T7, TP1, TP28  
DOT Packaging Exceptions (49 CFR 173.xxx) : 150  
DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27) : 5 L  
DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75) : 60 L  
DOT Vessel Stowage Location : A  
DOT Vessel Stowage Other : 40  
Emergency Response Guide (ERG) Number : 132  
Other information : No supplementary information available.  
Special transport precautions : No special precautions required.

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### Transportation of Dangerous Goods

Transport document description	: UN2924 FLAMMABLE LIQUID, CORROSIVE, N.O.S. (Isopropanol ; Citric acid), 3 (8), III
UN-No. (TDG)	: UN2924
Proper Shipping Name (Transportation of Dangerous Goods)	: FLAMMABLE LIQUID, CORROSIVE, N.O.S. (Isopropanol ; Citric acid)
TDG Primary Hazard Classes	: 3 - Class 3 - Flammable Liquids
Packing group	: III - Minor Danger
TDG Subsidiary Classes	: 8
TDG Special Provisions	: 16
Explosive Limit and Limited Quantity Index	: 5 L
Passenger Carrying Road Vehicle or Passenger Carrying Railway Vehicle Index	: 5 L

### Transport by sea

Transport document description (IMDG)	: UN 2924 FLAMMABLE LIQUID, CORROSIVE, N.O.S. (Isopropanol ; Citric acid), 3 (8), III, MARINE POLLUTANT/ENVIRONMENTALLY HAZARDOUS
UN-No. (IMDG)	: 2924
Proper Shipping Name (IMDG)	: FLAMMABLE LIQUID, CORROSIVE, N.O.S. (Isopropanol ; Citric acid)
Class (IMDG)	: 3 - Flammable liquids
Packing group (IMDG)	: III - substances presenting low danger
Subsidiary risks (IMDG)	: 8 - Corrosive substances
Marine pollutant	: Yes



### Air transport

Transport document description (IATA)	: UN 2924 Flammable liquid, corrosive, n.o.s. (Isopropanol ; Citric acid), 3 (8), III, ENVIRONMENTALLY HAZARDOUS
UN-No. (IATA)	: 2924
Proper Shipping Name (IATA)	: Flammable liquid, corrosive, n.o.s. (Isopropanol ; Citric acid)
Class (IATA)	: 3 - Flammable Liquids
Packing group (IATA)	: III - Minor Danger
Subsidiary hazards (IATA)	: 8 - Corrosive substances

## SECTION 15: Regulatory information

### 15.1. US Federal regulations

#### DECON-CYCLE®. Also known as: DECON-CYCLE® II

SARA Section 311/312 Hazard Classes	Physical hazard - Flammable (gases, aerosols, liquids, or solids) Health hazard - Skin corrosion or Irritation Health hazard - Serious eye damage or eye irritation Health hazard - Respiratory or skin sensitization Health hazard - Carcinogenicity Health hazard - Reproductive toxicity Health hazard - Specific target organ toxicity (single or repeated exposure)
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Chemical(s) subject to the reporting requirements of Section 313 or Title III of the Superfund Amendments and Reauthorization Act (SARA) of 1986 and 40 CFR Part 372.

Isopropanol	CAS-No. 67-63-0	7 - < 13%
Biphenyl-2-ol (ortho-phenylphenol)	CAS-No. 90-43-7	5 - < 10%

#### 2-methylpentane-2,4-diol (hexylene glycol) (107-41-5)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

#### Isopropanol (67-63-0)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

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<b>Citric acid (77-92-9)</b>	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
<b>Biphenyl-2-ol (ortho-phenylphenol) (90-43-7)</b>	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
<b>Clorofene (ortho-benzyl-para-chlorophenol) (120-32-1)</b>	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
<b>Dodecylbenzenesulfonic acid (27176-87-0)</b>	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
CERCLA RQ	1000 lb
<b>2,2',2''-nitrilotriethanol (102-71-6)</b>	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
<b>Benzenesulfonic acid, C10-16-alkyl derivs. (68584-22-5)</b>	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	

### 15.2. International regulations

#### CANADA

<b>Benzenesulfonic acid, C10-16-alkyl derivs. (68584-22-5)</b>
Listed on the Canadian DSL (Domestic Substances List)

#### EU-Regulations

#### National regulations

No additional information available

### 15.3. US State regulations

**⚠ WARNING:** This product can expose you to Biphenyl-2-ol (ortho-phenylphenol), which is known to the State of California to cause cancer. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).

Component	State or local regulations
2-methylpentane-2,4-diol (hexylene glycol)(107-41-5)	U.S. - New Jersey - Right to Know Hazardous Substance List
Isopropanol(67-63-0)	U.S. - New Jersey - Right to Know Hazardous Substance List
Biphenyl-2-ol (ortho-phenylphenol)(90-43-7)	U.S. - New Jersey - Right to Know Hazardous Substance List
Dodecylbenzenesulfonic acid(27176-87-0)	U.S. - New Jersey - Right to Know Hazardous Substance List; U.S. - Pennsylvania - RTK (Right to Know) List
2,2',2''-nitrilotriethanol(102-71-6)	U.S. - New Jersey - Right to Know Hazardous Substance List

### SECTION 16: Other information

Revision date	: 11/22/2019
Data sources	: US OSHA HazCom (GHS) 25 May 2012.
Other information	: This chemical is a pesticide product registered by the United States Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law (FIFRA). These requirements differ from the classification criteria and hazard information required for safety data sheets (SDS), and for workplace labels of non-pesticide chemicals.

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### Full text of H-phrases:

H225	Highly flammable liquid and vapor
H226	Flammable liquid and vapor
H302	Harmful if swallowed
H314	Causes severe skin burns and eye damage
H315	Causes skin irritation
H317	May cause an allergic skin reaction
H318	Causes serious eye damage
H319	Causes serious eye irritation
H332	Harmful if inhaled
H335	May cause respiratory irritation
H336	May cause drowsiness or dizziness
H351	Suspected of causing cancer
H361	Suspected of damaging fertility or the unborn child
H373	May cause damage to organs through prolonged or repeated exposure
H400	Very toxic to aquatic life
H401	Toxic to aquatic life
H410	Very toxic to aquatic life with long lasting effects

### Abbreviations and acronyms:

	ATE (Acute Toxicity Estimate)
	CAS (Chemical Abstracts Service) number
	DNEL (Derived No Effect Level)
	EC50 (Effective Concentration 50%)
	IARC (International Agency for Research on Cancer)
	IATA (International Air Transport Association)
	IMDG (International Maritime Dangerous Goods Code)
	IMO (International Maritime Organisation)
	LC50 (Lethal Concentration 50%)
	LD50 (Lethal Dose 50%)
	OECD (Organisation for Economic Co-operation and Development)
	PBT (Persistent, Bioaccumulative and Toxic)
	PNEC (Predicted No Effect Concentration)
	STEL (Short Term Exposure Limit)
	TSCA (Toxic Substances Control Act) (US)
	TWA (Time Weighted Average)
	UNxxxx (Number assigned by the United Nations Committee of Experts on the Transport of Dangerous Goods)
	vPvB (very Persistent and very Bioaccumulative)

NFPA health hazard

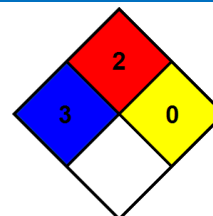
: 3 - Materials that, under emergency conditions, can cause serious or permanent injury.

NFPA fire hazard

: 2 - Materials that must be moderately heated or exposed to relatively high ambient temperatures before ignition can occur.

NFPA reactivity

: 0 - Material that in themselves are normally stable, even under fire conditions.



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### Hazard Rating

- Health : 3 Serious Hazard - Major injury likely unless prompt action is taken and medical treatment is given
- Flammability : 2 Moderate Hazard - Materials which must be moderately heated or exposed to high ambient temperatures before ignition will occur. Includes liquids having a flash point at or above 100 F but below 200 F. (Classes II & IIIA)
- Physical : 0 Minimal Hazard - Materials that are normally stable, even under fire conditions, and will NOT react with water, polymerize, decompose, condense, or self-react. Non-Explosives.
- Personal protection : G  
G - Safety glasses, Gloves, Vapor respirator

### Indication of changes:

Section	Changed item	Change	Comments
3	Composition/Information on ingredients	Modified	

SDS US (GHS HazCom 2012)

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