



DECON-CYCLE® PLUS

Safety Data Sheet

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

VELTEK ASSOCIATES, INC.

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SECTION 1: Identification

1.1. Identification

Product form : Mixture
 Product name : DECON-CYCLE® PLUS
 Product code : SDS VEL-141

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)
 20 Cope Dr.
 Kanata, ON K2M 2V8, 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
Corrosive to metals Category 1	H290 May be corrosive to metals
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
 H290 - May be corrosive to metals
 H314 - Causes severe skin burns and eye damage
 H317 - May cause an allergic skin reaction
 H318 - Causes serious eye damage

DECON-CYCLE® PLUS

Safety Data Sheet

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

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. P234 - Keep only in original container. 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 Water spray, alcohol resistant foam, carbon dioxide (CO2), Dry powder to extinguish. P390 - Absorb spillage to prevent material-damage. P391 - Collect spillage. P403+P235 - Store in a well-ventilated place. Keep cool. P405 - Store locked up. P406 - Store in corrosive resistant container with a resistant inner liner. 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

Other hazards not contributing to the 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
Sulfuric acid, mono-C10-16-alkyl esters, sodium salts	(CAS-No.) 68585-47-7	14 - 22	Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Eye Dam. 1, H318
2-methylpentane-2,4-diol (hexylene glycol)	(CAS-No.) 107-41-5	13 - 17	Skin Irrit. 2, H315 Eye Irrit. 2A, H319
Citric acid	(CAS-No.) 77-92-9	2.5 - 17	Eye Irrit. 2A, H319
Benzenesulfonic acid, C10-16-alkyl derivs.	(CAS-No.) 68584-22-5	0 - 16	Eye Irrit. 2A, H319
Isopropanol	(CAS-No.) 67-63-0	7 - 13	Flam. Liq. 2, H225 Eye Irrit. 2A, H319 STOT SE 3, H336
Clorofene (ortho-benzyl-para-chlorophenol)	(CAS-No.) 120-32-1	11	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)

DECON-CYCLE® PLUS

Safety Data Sheet

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

Name	Product identifier	%	GHS US classification
Biphenyl-2-ol (ortho-phenylphenol)	(CAS-No.) 90-43-7	11	Skin Irrit. 2, H315 Eye Dam. 1, H318 STOT SE 3, H335 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
Etidronic acid	(CAS-No.) 2809-21-4	0 - 6	Met. Corr. 1, H290 Acute Tox. 4 (Oral), H302 Eye Dam. 1, H318

*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 : Immediately remove contaminated clothing or footwear. Rinse skin with plenty of water or shower. 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. Never give anything by mouth to an unconscious person. Rinse mouth. Give 100 - 200 ml of water to drink. Obtain immediate medical attention.

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

- Potential Adverse human health effects and symptoms : Causes severe skin burns and eye damage. May cause an allergic skin reaction. Skin rash/inflammation. At high concentrations, the vapors can be irritating to the respiratory system. Severe irritation or burns to the mouth, throat, esophagus, and stomach. Suspected of causing cancer. Suspected of damaging fertility. May cause damage to organs (kidneys) through prolonged or repeated exposure.

4.3. Immediate medical attention and special treatment, if necessary

Treat symptomatically. Doctor: gastric lavage is not recommended.

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

- Suitable extinguishing media : Water spray. Alcohol-resistant foam. Carbon dioxide. Dry powder.
- Unsuitable extinguishing media : Do not use water jet.

5.2. Specific hazards arising from the chemical

- Fire hazard : Highly flammable liquid and vapour.
- Explosion hazard : Vapors may form explosive mixture with air.
- Hazardous decomposition products in case of fire : Fire may produce irritating, corrosive and/or toxic gases. Phenolic compounds. Carbon monoxide. Carbon dioxide. Chlorine. Sulphur oxides. Phosphine oxides.

5.3. Special protective equipment and precautions for fire-fighters

- Firefighting instructions : Keep upwind. Exercise caution when fighting any chemical fire. On heating, there is a risk of bursting due to internal pressure build-up. Cool down the containers exposed to heat with a water spray. Do not allow run-off from fire fighting to enter drains or water courses.
- 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.

DECON-CYCLE® PLUS

Safety Data Sheet

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

Emergency procedures : Remove all sources of ignition. 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. Avoid release to the environment. 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

For containment : Stop leak, if possible without risk. Dam up the liquid spill.
Methods for cleaning up : Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal. Store in corrosive resistant container with a resistant inner liner.

6.4. Reference to other sections

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

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use only non-sparking tools. Take precautionary measures against static discharge. Do not handle until all safety precautions have been read and understood. 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 : Do not eat, drink or smoke when using this product. Handle in accordance with good industrial hygiene and safety practice. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Wash contaminated clothing before reuse. Contaminated work clothing should not be allowed out of the workplace.

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 or corrosive resistant and/or lined container. Keep container tightly closed. Store in a well-ventilated place. Keep cool. Store locked up.
Incompatible materials : Strong oxidizing agents.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

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 ³)	980 mg/m ³
OSHA PEL (TWA) (ppm)	400 ppm
Regulatory reference (US-OSHA)	OSHA Annotated Table Z-1
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 ³)	10 mg/m ³
ACGIH STEL (ppm)	50 ppm

DECON-CYCLE® PLUS

Safety Data Sheet

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

Remark (ACGIH)	Eye & URT irr
Regulatory reference	ACGIH 2019

8.2. Appropriate engineering controls

- Appropriate engineering controls : Provide good ventilation in process area to prevent formation of vapor. Ensure exposure is below occupational exposure limits (where available). Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure.
- Environmental exposure controls : Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams.

8.3. Individual protection measures/Personal protective equipment

Personal protective equipment:

Avoid all unnecessary exposure. Wear suitable protective clothing.

Hand protection:

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

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. Handle in accordance with good industrial hygiene and safety procedures.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Appearance	: Clear.
Color	: Light amber
Odor	: Slight Phenol
Odor threshold	: No data available
pH	: 1 – 3 (Concentrate)
Melting point	: Not applicable.
Freezing point	: No data available
Boiling point	: 212 °F (100 °C)
Flash point	: No data available
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	: 1.064 – 1.096 (68 °F)(Water = 1)
Solubility	: Water: completely 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

DECON-CYCLE® PLUS

Safety Data Sheet

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

Explosion limits	: No data available
Explosive properties	: Not explosive. Vapors may form explosive mixture with air.
Oxidizing properties	: Not oxidizing.

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). Highly flammable liquid and vapor.

10.3. Possibility of hazardous reactions

None known.

10.4. Conditions to avoid

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Keep out of direct sunlight.

10.5. Incompatible materials

Strong oxidizing agents.

10.6. Hazardous decomposition products

Fire may produce irritating, corrosive and/or toxic gases. Carbon monoxide. Carbon dioxide. Phenolic compounds. Chlorine. Sulphur oxides. Phosphine oxides.

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

Isopropanol (67-63-0)	
LD50 oral, rat	5840 mg/kg
LD50 dermal, rat	16.4 ml/kg
LC50 inhalation, rat (ppm)	> 10000 ppm - 6 Hours

Clorofene (ortho-benzyl-para-chlorophenol) (120-32-1)	
LD50 oral, rat	4147 mg/kg
LD50 dermal, rat	> 2000 mg/kg
LC50 inhalation, rat (mg/l)	2.5 mg/l - 4 Hours

Biphenyl-2-ol (ortho-phenylphenol) (90-43-7)	
LD50 oral, rat	2733 mg/kg
LD50 dermal, rabbit	> 2000 mg/kg
LC50 inhalation, rat (mg/l)	> 949 mg/m ³ - 1 Hours

Citric acid (77-92-9)	
LD50 oral, rat	5400 mg/kg
LD50 dermal, rat	> 2000 mg/kg

Etidronic acid (2809-21-4)	
LD50 oral, rat	1878 mg/kg body weight (calculated value)
LD50 dermal, rabbit	> 3505 mg/kg body weight (calculated value)

Skin corrosion/irritation	: Causes severe skin burns. pH: 1 – 3 (Concentrate)
Serious eye damage/irritation	: Causes serious eye damage. pH: 1 – 3 (Concentrate)
Respiratory or skin sensitization	: May cause an allergic skin reaction.
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Suspected of causing cancer.

DECON-CYCLE® PLUS

Safety Data Sheet

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

Isopropanol (67-63-0)	
IARC group	3 - Not classifiable

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

Reproductive toxicity : Suspected of damaging fertility or the unborn child.

STOT-single exposure : Not classified

Isopropanol (67-63-0)	
STOT-single exposure	May cause drowsiness or dizziness.

Biphenyl-2-ol (ortho-phenylphenol) (90-43-7)	
STOT-single exposure	May cause respiratory irritation.

STOT-repeated exposure : May cause damage to organs (kidneys) through prolonged or repeated exposure.

Clorofene (ortho-benzyl-para-chlorophenol) (120-32-1)	
STOT-repeated exposure	May cause damage to organs (kidneys) through prolonged or repeated exposure.

Aspiration hazard : Not classified

Viscosity, kinematic : No data available

Potential Adverse human health effects and symptoms : Causes severe skin burns and eye damage. May cause an allergic skin reaction. Skin rash/inflammation. At high concentrations, the vapors can be irritating to the respiratory system. Severe irritation or burns to the mouth, throat, esophagus, and stomach. Suspected of causing cancer. Suspected of damaging fertility. May cause damage to organs (kidneys) through prolonged or repeated exposure.

SECTION 12: Ecological information

12.1. Toxicity

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

Clorofene (ortho-benzyl-para-chlorophenol) (120-32-1)	
LC50 fish	1.5 mg/l - 96 Hours (Danio rerio)
EC50 Daphnia	0.655 mg/l - 48 Hours (Daphnia magna)
LC50 fish 2	0.33 mg/l - 96 Hours (Lepomis macrochirus)
EC50 Daphnia 2	0.286 mg/l - 48 Hours (Crassostrea virginica)
NOEC (chronic)	0.0067 mg/l - 21 days (Daphnia magna, reproduction)
NOEC chronic fish	< 0.0095 mg/l - 30 days (Danio rerio)

Biphenyl-2-ol (ortho-phenylphenol) (90-43-7)	
LC50 fish	4.5 mg/l - 96 Hours (Danio rerio)
EC50 Daphnia	2.7 mg/l - 48 Hours (Daphnia magna, Mobility)
ErC50 (algae)	3.57 mg/l - 72 Hours (Pseudokirchneriella subcapitata, Growth rate), (OECD 201 method)
NOEC (chronic)	0.009 mg/l - 21 days (Daphnia magna, reproduction), (OECD 211 method)
NOEC chronic fish	0.036 mg/l - 21 days (Pimephales promelas, reproduction)
NOEC chronic algae	0.468 mg/l - 72 Hours (Pseudokirchneriella subcapitata, Growth rate), (OECD 201 method)

2-methylpentane-2,4-diol (hexylene glycol) (107-41-5)	
LC50 fish	8510 mg/l - 96 Hours (Gambusia affinis)
EC50 Daphnia	5410 mg/l - 48 Hours (Daphnia magna)
Additional ecotox information	NOEC, algae: 429 mg/l (72 Hours, Pseudokirchneriella subcapitata, Growth rate/Biomass, (OECD 201 method))

DECON-CYCLE® PLUS

Safety Data Sheet

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

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

Etidronic acid (2809-21-4)	
LC50 fish	195 mg/l - 96 Hours (<i>Oncorhynchus mykiss</i>)
EC50 Daphnia	527 mg/l - 48 Hours (<i>Daphnia magna</i> , Mobility), (OECD 202 method)
LC50 fish 2	2180 mg/l - 96 Hours (<i>Cyprinodon variegatus</i>), (OECD 203 method)
EC50 Daphnia 2	1770 mg/l - 96 Hours (<i>Palaemonetes pugio</i>)
NOEC (chronic)	6.75 mg/l - 28 days (<i>Daphnia magna</i>)
NOEC chronic crustacea	6.75 mg/l - 28 days (<i>Daphnia magna</i> , mortality/reproduction)

12.2. Persistence and degradability

DECON-CYCLE® PLUS	
Persistence and degradability	No information available.

Isopropanol (67-63-0)	
Persistence and degradability	Expected to be readily biodegradable.

Clorofene (ortho-benzyl-para-chlorophenol) (120-32-1)	
Persistence and degradability	Inherently biodegradable.

Biphenyl-2-ol (ortho-phenylphenol) (90-43-7)	
Persistence and degradability	Readily biodegradable.
Biodegradation	70.8 – 75.7 % - 28 days (OECD 301B method)

2-methylpentane-2,4-diol (hexylene glycol) (107-41-5)	
Persistence and degradability	Readily biodegradable.
Biodegradation	81 % - 28 days (OECD 301F method)

Etidronic acid (2809-21-4)	
Persistence and degradability	Not readily biodegradable.
Biochemical oxygen demand (BOD)	15.1 mg/l - 5 days (OECD 301D method)
Chemical oxygen demand (COD)	0.066 g O ₂ /l (60% Aqueous solution), (OECD 301D method)

12.3. Bioaccumulative potential

DECON-CYCLE® PLUS	
Bioaccumulative potential	No information available.

Isopropanol (67-63-0)	
Bioconcentration factor (BCF REACH)	3
Log Pow	0.05

Clorofene (ortho-benzyl-para-chlorophenol) (120-32-1)	
Log Pow	4.276 (25 °C)

Biphenyl-2-ol (ortho-phenylphenol) (90-43-7)	
BCF fish 1	21.7 (<i>Danio rerio</i>)
Log Pow	3.18 (22.5 °C)(OECD 107 method)
Bioaccumulative potential	Not expected to bioaccumulate.

2-methylpentane-2,4-diol (hexylene glycol) (107-41-5)	
Bioaccumulative potential	Based on the n-octanol/water partition coefficient accumulation in organisms is not expected.

Etidronic acid (2809-21-4)	
BCF fish 1	< 7 <i>Cyprinus carpio</i> , Whole body (Solution concentration: 0.06 mg/L)
BCF fish 2	< 2 <i>Cyprinus carpio</i> , Whole body (Solution concentration: 0.6 mg/L)
Log Pow	-3.5
Bioaccumulative potential	Not expected to bioaccumulate.

12.4. Mobility in soil

DECON-CYCLE® PLUS	
Ecology - soil	Miscible with water.

DECON-CYCLE® PLUS

Safety Data Sheet

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

Clorofene (ortho-benzyl-para-chlorophenol) (120-32-1)	
Ecology - soil	Moderately soluble in water.
Biphenyl-2-ol (ortho-phenylphenol) (90-43-7)	
Log Koc	2.4 – 2.6 (20 °C)
2-methylpentane-2,4-diol (hexylene glycol) (107-41-5)	
Log Koc	0.001 (20 °C, QSAR)
Ecology - soil	Not expected to adsorb to soil.
Etidronic acid (2809-21-4)	
Log Koc	4.22
Ecology - soil	Adsorbs into the soil.

12.5. Other adverse effects

Other information : Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Disposal methods

Waste disposal recommendations : Dispose in a safe manner in accordance with local/national regulations. Empty containers should be taken to an approved waste handling site for recycling or disposal.

Additional information : Handle empty containers with care because residual vapors are flammable.

Ecology - waste materials : Avoid release to the environment.

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

DECON-CYCLE® PLUS

Safety Data Sheet

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

DOT Vessel Stowage Other : 40
Emergency Response Guide (ERG) Number : 132
Other information : No supplementary information available.

Transportation of Dangerous Goods

Transport document description : UN2924 FLAMMABLE LIQUID, CORROSIVE, N.O.S. (Isopropanol ; Etidronic 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® PLUS	
SARA Section 311/312 Hazard Classes	Physical hazard - Flammable (gases, aerosols, liquids, or solids) Physical hazard - Corrosive to metals 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)

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	11%

DECON-CYCLE® PLUS

Safety Data Sheet

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

Isopropanol (67-63-0)
Listed on the United States TSCA (Toxic Substances Control Act) inventory
Clorofene (ortho-benzyl-para-chlorophenol) (120-32-1)
Listed on the United States TSCA (Toxic Substances Control Act) inventory
Biphenyl-2-ol (ortho-phenylphenol) (90-43-7)
Listed on the United States TSCA (Toxic Substances Control Act) inventory
2-methylpentane-2,4-diol (hexylene glycol) (107-41-5)
Listed on the United States TSCA (Toxic Substances Control Act) inventory
Sulfuric acid, mono-C10-16-alkyl esters, sodium salts (68585-47-7)
Listed on the United States TSCA (Toxic Substances Control Act) inventory
Citric acid (77-92-9)
Listed on the United States TSCA (Toxic Substances Control Act) inventory
Benzenesulfonic acid, C10-16-alkyl derivs. (68584-22-5)
Listed on the United States TSCA (Toxic Substances Control Act) inventory
Etidronic acid (2809-21-4)
Listed on the United States TSCA (Toxic Substances Control Act) inventory

15.2. International regulations

CANADA

Isopropanol (67-63-0)
Listed on the Canadian DSL (Domestic Substances List)
Clorofene (ortho-benzyl-para-chlorophenol) (120-32-1)
Listed on the Canadian DSL (Domestic Substances List)
Biphenyl-2-ol (ortho-phenylphenol) (90-43-7)
Listed on the Canadian DSL (Domestic Substances List)
2-methylpentane-2,4-diol (hexylene glycol) (107-41-5)
Listed on the Canadian DSL (Domestic Substances List)
Sulfuric acid, mono-C10-16-alkyl esters, sodium salts (68585-47-7)
Listed on the Canadian DSL (Domestic Substances List)
Benzenesulfonic acid, C10-16-alkyl derivs. (68584-22-5)
Listed on the Canadian DSL (Domestic Substances List)
Etidronic acid (2809-21-4)
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.

Component	State or local regulations
Isopropanol(67-63-0)	U.S. - Massachusetts - Right To Know List; U.S. - New Jersey - Right to Know Hazardous Substance List; U.S. - Pennsylvania - RTK (Right to Know) List
Biphenyl-2-ol (ortho-phenylphenol)(90-43-7)	U.S. - Massachusetts - Right To Know List; U.S. - New Jersey - Right to Know Hazardous Substance List; U.S. - Pennsylvania - RTK (Right to Know) List
2-methylpentane-2,4-diol (hexylene glycol)(107-41-5)	U.S. - New Jersey - Right to Know Hazardous Substance List; U.S. - Pennsylvania - RTK (Right to Know) List

DECON-CYCLE® PLUS

Safety Data Sheet

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

SECTION 16: Other information

Revision date	: 02/27/2020
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). US EPA Registration number: 68959-12. These requirements differ from the classification criteria and hazard information required for safety data sheets (SDS), and for workplace labels of non-pesticide chemicals.

Full text of H-phrases:

H225	Highly flammable liquid and vapor
H226	Flammable liquid and vapor
H290	May be corrosive to metals
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:

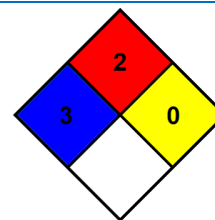
	ACGIH (American Conference of Government Industrial Hygienists)
	ATE (Acute Toxicity Estimate)
	CAS (Chemical Abstracts Service) number
	DNEL (Derived No Effect Level)
	EC50 (Effective Concentration 50%)
	IARC (International Agency for Research on Cancer)
	IATA (International Air Transport Association)
	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)
	OSHA (Occupational Safety and Health Administration) (US)
	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)

DECON-CYCLE® PLUS

Safety Data Sheet

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

- 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.



- Hazard Rating
- Health : 3 Serious Hazard - Major injury likely unless prompt action is taken and medical treatment is given
* - Chronic (long-term) health effects may result from repeated overexposure
- 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 : 4 Severe Hazard - Materials that are readily capable of explosive water reaction, detonation or explosive decomposition, polymerization, or self-reaction at normal temperature and pressure.

Indication of changes:

Section	Changed item	Change	Comments
2	Hazards identification	Modified	
3	Composition/Information on ingredients	Modified	
4	First aid measures	Modified	
6	Accidental release measures	Modified	
7	Handling and storage	Modified	
10	Stability and reactivity	Modified	
11	Toxicological information	Modified	
12.	Ecological information	Modified	
13	Disposal considerations	Modified	
14	Transport information	Modified	
15	Regulatory information	Modified	
16	Other information	Modified	
16	Other information	Modified	

SDS US (GHS HazCom 2012)

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This SDS has been translated into the official language of the country/region in which the product is to be placed on the market. Where no official translation exists, the regulatory text is reported in English, as it appears in the relevant regulatory text.