## SECTION 1: Identification

### 1.1. Identification

| | | |
|---|---|---|
| Product form | : | Mixture |
| Product name | : | DECON-PHENE® PLUS |
| Product code | : | SDS VEL-142 |

### 1.2. Recommended use and restrictions on use

| | | |
|---|---|---|
| Use of the substance/mixture | : | Disinfectant<br>Concentrate |
| Restrictions on use | : | Concentrate. For Professional use only. Product is concentrated, not intended for direct application to surfaces. |

### 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: 1-(888)-595-8070

### 1.4. Emergency telephone number

| | | |
|---|---|---|
| Emergency number | : | CARECHEM 24: 1-215-207-0061<br>1-866-928-0789 (toll free USA)<br>Canada: 1-800-579-7421 (toll free)<br>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 1B | 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 |
| Specific target organ toxicity – Single exposure, Category 3, Respiratory tract irritation | H335 | May cause respiratory irritation |
| 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
H335 - May cause respiratory irritation
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

Precautionary statements (GHS US) : 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/ventilating/lighting equipment.
P242 - Use only non-sparking tools.
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, face 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, Dry powder to extinguish.
P403+P235 - Store in a well-ventilated place. Keep cool.
P501 - Dispose of contents/container to an authorized waste collection point.

## 2.3. Other hazards which do not result in classification

No additional information available

## 2.4. Unknown acute toxicity (GHS US)

No additional information available

# SECTION 3: Composition/Information on ingredients

## 3.1. Substances

Not applicable

### 3.2. Mixtures

| Name | Product identifier | % | GHS US classification |
|---|---|---|---|
| Clorofene (ortho-benzyl-para-chlorophenol) | CAS-No.: 120-32-1 | 10-15 | Acute Tox. 4 (Inhalation), H332<br>Skin Irrit. 2, H315<br>Eye Dam. 1, H318<br>Skin Sens. 1, H317<br>Carc. 2, H351<br>Repr. 2, H361<br>STOT RE 2, H373<br>Aquatic Acute 1, H400<br>Aquatic Chronic 1, H410 |
| Biphenyl-2-ol (ortho-phenylphenol) | CAS-No.: 90-43-7 | 10-15 | Skin Irrit. 2, H315<br>Eye Dam. 1, H318<br>STOT SE 3, H335<br>Aquatic Acute 1, H400<br>Aquatic Chronic 1, H410 |
| Sulfuric acid, mono-C10-16-alkyl esters, sodium salts | CAS-No.: 68585-47-7 | 5 - 10 | Skin Irrit. 2, H315<br>Eye Dam. 1, H318 |
| Isopropanol | CAS-No.: 67-63-0 | 1 - 5 | Flam. Liq. 2, H225<br>Eye Irrit. 2A, H319<br>STOT SE 3, H336 |
| Tetrasodium ethylene diamine tetraacetate | CAS-No.: 64-02-8 | 1 - 5 | Acute Tox. 4 (Oral), H302<br>Acute Tox. 4 (Inhalation), H332<br>Eye Dam. 1, H318<br>STOT RE 2, H373 |
| Sodium hydroxide | CAS-No.: 1310-73-2 | 1 - 5 | Met. Corr. 1, H290<br>Skin Corr. 1A, H314<br>Eye Dam. 1, H318 |
| Ethylene glycol | CAS-No.: 107-21-1 | 1 - 5 | Acute Tox. 4 (Oral), H302<br>STOT RE 2, H373 |
| Sodium xylenesulphonate | CAS-No.: 1300-72-7 | 1 - 5 | Eye Irrit. 2A, H319 |
| Sodium nitrite | CAS-No.: 7632-00-0 | 0.1 - 1 | Ox. Sol. 2, H272<br>Acute Tox. 3 (Oral), H301<br>Eye Irrit. 2, H319<br>Aquatic Acute 1, H400 |
| Benzenesulfonic acid, C10-16-alkyl derivs. | CAS-No.: 68584-22-5 | 0.1 - 1 | Eye Irrit. 2A, H319 |

*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. 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. Severe irritation or burns to the mouth, throat, esophagus, and stomach. Irritation of the respiratory tract. May cause damage to organs (kidneys) through prolonged or repeated exposure. May cause damage to organs (respiratory tract) through prolonged or repeated exposure (if inhaled). May be harmful if swallowed.

### 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 : Flammable liquid and vapor.

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.

### 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 closed containers that are near the source of the fire. 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 : 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 : 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

Methods for cleaning up : Absorb spillage to prevent material-damage. 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 : Do not handle until all safety precautions have been read and understood. 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 : Store in original container. Store in corrosive resistant container with a resistant inner liner. 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) | TLV® Basis: Eye & URT irr; CNS impair. Notations: A4 (Not classifiable as a Human Carcinogen); BEI |
| Regulatory reference | ACGIH 2023 |
| **USA - ACGIH - Biological Exposure Indices** | |
| Local name | 2-PROPANOL |
| BEI (BLV) | 40 mg/l Parameter: Acetone - Medium: urine - Sampling time: End of shift at end of workweek - Notations: B, Ns |
| Regulatory reference | ACGIH 2023 |
| **USA - OSHA - Occupational Exposure Limits** | |
| Local name | Isopropyl alcohol |
| OSHA PEL (TWA) (mg/m³) | 980 mg/m³ |
| OSHA PEL TWA | 400 ppm |
| Regulatory reference (US-OSHA) | OSHA Annotated Table Z-1 |

| Sodium hydroxide (1310-73-2) | |
|---|---|
| **USA - ACGIH - Occupational Exposure Limits** | |
| Local name | Sodium hydroxide |

| Sodium hydroxide (1310-73-2) | |
|---|---|
| ACGIH OEL Ceiling | 2 mg/m³ |
| Remark (ACGIH) | URT, eye, & skin irr |
| Regulatory reference | ACGIH 2023 |
| **USA - OSHA - Occupational Exposure Limits** | |
| Local name | Sodium hydroxide |
| OSHA PEL (TWA) (mg/m³) | 2 mg/m³ |
| Regulatory reference (US-OSHA) | OSHA Annotated Table Z-1 |

| Ethylene glycol (107-21-1) | |
|---|---|
| **USA - ACGIH - Occupational Exposure Limits** | |
| Local name | Ethylene glycol |
| ACGIH TWA (ppm) | 25 ppm |
| ACGIH OEL STEL | 10 mg/m³ |
| ACGIH STEL (ppm) | 50 ppm |
| Remark (ACGIH) | Kidney dam; URT & eye irr |
| Regulatory reference | ACGIH 2023 |

## 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 stations 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 liquid. |
| Color | : | Amber |
| Odor | : | Slight Phenol |
| Odor threshold | : | No data available |
| pH | : | 11.75 – 13 (Concentrate) |
| Melting point | : | Not applicable. |
| Freezing point | : | No data available |
| Boiling point | : | 212 °F (100 °C) |
| Flash point | : | 134 °F |
| Relative evaporation rate (butyl acetate=1) | : | No data available |
| Flammability (solid, gas) | : | Flammable liquid and vapor. |
| Vapor pressure | : | No data available |
| Relative vapor density at 20°C | : | No data available |
| Relative density | : | 1.095 – 1.112 (68 °F)(Water = 1) |
| Solubility | : | Soluble in water.<br>Water: completely soluble |
| 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 | : | Not explosive. |
| 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).

### 10.3. Possibility of hazardous reactions

Flammable liquid and vapor.

### 10.4. Conditions to avoid

Extremely high or low temperatures.

### 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.

## 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

| DECON-PHENE® PLUS | |
|---|---|
| LD50 oral, rat | 4228 mg/kg (Rat) |

| 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 |
| ATE US (oral) | 4147 mg/kg body weight |
| ATE US (gases) | 4500 ppmV/4h |
| ATE US (vapors) | 2.5 mg/l/4h |
| ATE US (dust, mist) | 2.5 mg/l/4h |

| Tetrasodium ethylene diamine tetraacetate (64-02-8) | |
|---|---|
| LD50 oral, rat | 1780 – 2000 mg/kg |
| ATE US (oral) | 1780 mg/kg body weight |
| ATE US (gases) | 4500 ppmV/4h |
| ATE US (vapors) | 11 mg/l/4h |
| ATE US (dust, mist) | 1.5 mg/l/4h |
| LOAEC, Inhalation, rat | ca. 30 mg/m³ (6h) |

| Sodium nitrite (7632-00-0) | |
|---|---|
| LD50 oral, rat | 180 mg/kg |
| ATE US (oral) | 180 mg/kg body weight |

| Ethylene glycol (107-21-1) | |
|---|---|
| LD50 oral, rat | 7712 mg/kg |
| LD50 dermal | > 3500 mg/kg (mouse) |
| LC50 inhalation, rat (mg/l) | > 2.5 mg/l - 6 Hours (mist) |

| 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/m³ - 1 Hours |

| Benzenesulfonic acid, C10-16-alkyl derivs. (68584-22-5) | |
|---|---|
| LD50 oral, rat | > 5000 mg/kg (OECD 401 method) (Read-across) |

Skin corrosion/irritation : Causes severe skin burns.
pH: 11.75 – 13 (Concentrate)

Serious eye damage/irritation : Causes serious eye damage.
pH: 11.75 – 13 (Concentrate)

Respiratory or skin sensitization : May cause an allergic skin reaction.

Germ cell mutagenicity : Not classified

Carcinogenicity : Not classified

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

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

Reproductive toxicity : Not classified

STOT-single exposure : May cause respiratory irritation.

| 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. |

| Tetrasodium ethylene diamine tetraacetate (64-02-8) | |
|---|---|
| STOT-repeated exposure | May cause damage to organs (respiratory tract) through prolonged or repeated exposure (Inhalation). |

| Ethylene glycol (107-21-1) | |
|---|---|
| STOT-repeated exposure | May cause damage to organs (kidneys) through prolonged or repeated exposure (oral). |

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. Severe irritation or burns to the mouth, throat, esophagus, and stomach. Irritation of the respiratory tract. May cause damage to organs (kidneys) through prolonged or repeated exposure. May cause damage to organs (respiratory tract) through prolonged or repeated exposure (if inhaled). May be harmful if swallowed.

## SECTION 12: Ecological information

### 12.1. Toxicity

| Isopropanol (67-63-0) | |
|---|---|
| LC50 fish | 9640 mg/l |
| 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 - Crustacea [2] | 0.286 mg/l - 48 Hours (Crassostrea virginica) |
| EC50 72h - Algae [1] | 0.435 mg/l - 72 Hours (Navicula pelliculosa) |
| NOEC (chronic) | 0.0067 mg/l - 21 days (Daphna magna, reproduction) |
| NOEC chronic fish | < 0.0095 mg/l - 30 days (Danio rerio) |

| Tetrasodium ethylene diamine tetraacetate (64-02-8) | |
|---|---|
| LC50 fish | > 100 mg/l 96h - Oncorhynchus mykiss (OECD 203 method) |
| EC50 Daphnia | > 114 mg/l 48h - Daphnia Magna (OECD 202 method) |
| EC50 72h - Algae [1] | > 100 72h - Raphidocelis subcapitata (OECD 201 method) |
| NOEC chronic fish | ≥ 35.1 mg/l 35d - Danio rerio (OECD 210 method) |
| NOEC chronic crustacea | 25 mg/l 21d - Daphnia Magna (OECD 211 method) |
| NOEC chronic algae | 79.4 mg/l 72h - Raphidocelis subcapitata (OECD 201 method) |

| Sodium hydroxide (1310-73-2) | |
|---|---|
| LC50 fish | 35 – 189 mg/l |
| EC50 Daphnia | 40.4 mg/l - 48 Hours (Ceriodaphnia sp.) |

| Sodium nitrite (7632-00-0) | |
|---|---|
| LC50 fish | 0.54 – 26.3 mg/l - 96 Hours (Oncorhynchus mykiss) |
| LC50 other aquatic organisms | 4.93 mg/l - 96 Hours (Cherax quadricarinatus) |
| EC50 Daphnia | 15.4 mg/l - 48 Hours (Daphnia magna, Mobility), (OECD 202 method) |
| ErC50 algae | > 100 mg/l - 72 Hours (Desmodesmus subspicatus), (OECD 201 method) |
| NOEC (chronic) | 2 mg/l - 80 days (Penaeus monodon) |
| NOEC chronic fish | 1.05 mg/l - 29 days (Cyprinus carpio), (OECD 210 method) |
| NOEC chronic crustacea | 9.86 mg/l - 80 days (Penaeus monodon, bodyweight) |
| NOEC, algae | > 100 mg/l (72 Hours, Desmodesmus subspicatus, Growth rate (OECD 201 method)) |

| Ethylene glycol (107-21-1) | |
|---|---|
| LC50 fish | > 72860 mg/l - 96 Hours (Pimephales promelas)(EPA 600/4-90/027) |
| EC50 Daphnia | > 100 mg/l - 48 Hours (Daphnia magna)(OECD 202 method) |
| EC50 72h - Algae [1] | > 100 mg/l - 72 Hours (Scenedesmus quadricauda) |

| 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) |

| Biphenyl-2-ol (ortho-phenylphenol) (90-43-7) | |
|---|---|
| NOEC chronic algae | 0.468 mg/l - 72 Hours (Pseudokirchneriella subcapitata, Growth rate), (OECD 201 method) |

| Benzenesulfonic acid, C10-16-alkyl derivs. (68584-22-5) | |
|---|---|
| LC50 fish | > 10000 mg/l 96h (OECD 203 method) - Cyprinodon variegatus |
| EC50 Daphnia | > 1000 mg/l 48h - Daphnia magna |
| EC50 96h - Algae [1] | > 1000 Raphidocelis subcapitata |

## 12.2. Persistence and degradability

| DECON-PHENE® PLUS | |
|---|---|
| Persistence and degradability | No information available. |

| Isopropanol (67-63-0) | |
|---|---|
| Persistence and degradability | Readily biodegradable. |
| Biochemical oxygen demand (BOD) | 1.19 g O2/g substance - 5 days (Test method EU C.5) |
| Chemical oxygen demand (COD) | 2.23 g O2/g substance (Test method EU C.6) |
| Biodegradation | 53 % - 5 days |

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

| Sulfuric acid, mono-C10-16-alkyl esters, sodium salts (68585-47-7) | |
|---|---|
| Persistence and degradability | Not established. |

| Tetrasodium ethylene diamine tetraacetate (64-02-8) | |
|---|---|
| Persistence and degradability | Not readily biodegradable. |

| Sodium hydroxide (1310-73-2) | |
|---|---|
| Persistence and degradability | Not established. |

| Sodium nitrite (7632-00-0) | |
|---|---|
| Persistence and degradability | Not established. |

| Ethylene glycol (107-21-1) | |
|---|---|
| Persistence and degradability | Readily biodegradable. |
| Biodegradation | 90 – 100 % - 10 days (OECD 301A method) |

| Sodium xylenesulphonate (1300-72-7) | |
|---|---|
| Persistence and degradability | Not established. |

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

| Benzenesulfonic acid, C10-16-alkyl derivs. (68584-22-5) | |
|---|---|
| Persistence and degradability | Not readily biodegradable. |
| Chemical oxygen demand (COD) | 8 % ThOD 28d (OECD 301D method) |

## 12.3. Bioaccumulative potential

| DECON-PHENE® PLUS | |
|---|---|
| Bioaccumulative potential | No information available. |

| Isopropanol (67-63-0) | |
|---|---|
| Log Pow | 0.05 (25°C) |
| Bioaccumulative potential | Based on the n-octanol/water partition coefficient accumulation in organisms is not expected. |

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

| Tetrasodium ethylene diamine tetraacetate (64-02-8) | |
|---|---|
| BCF - Fish [1] | 1.8 l/kg |
| Log Pow | -13.17 (calculated value) |
| Bioaccumulative potential | Not expected to bioaccumulate. |

| Ethylene glycol (107-21-1) | |
|---|---|
| Log Pow | -1.36 (25 °C) |

| Biphenyl-2-ol (ortho-phenylphenol) (90-43-7) | |
|---|---|
| BCF - Fish [1] | 21.7 (Danio rerio) |
| Log Pow | 3.18 (22.5 °C)(OECD 107 method) |
| Bioaccumulative potential | Not expected to bioaccumulate. |

| Benzenesulfonic acid, C10-16-alkyl derivs. (68584-22-5) | |
|---|---|
| Log Pow | 2 |
| Bioaccumulative potential | Not expected to bioaccumulate. |

## 12.4. Mobility in soil

| DECON-PHENE® PLUS | |
|---|---|
| Ecology - soil | Miscible with water. |

| Isopropanol (67-63-0) | |
|---|---|
| Ecology - soil | Miscible with water. |

| Clorofene (ortho-benzyl-para-chlorophenol) (120-32-1) | |
|---|---|
| Ecology - soil | Moderately soluble in water. |

| Tetrasodium ethylene diamine tetraacetate (64-02-8) | |
|---|---|
| Ecology - soil | Mobile in soils. |

| Sodium nitrite (7632-00-0) | |
|---|---|
| Ecology - soil | Soluble in water. |

| Ethylene glycol (107-21-1) | |
|---|---|
| Organic Carbon Normalized Adsorption Coefficient (Log Koc) | 0 (QSAR) |

| Biphenyl-2-ol (ortho-phenylphenol) (90-43-7) | |
|---|---|
| Organic Carbon Normalized Adsorption Coefficient (Log Koc) | 2.4 – 2.6 (20 °C) |

| Benzenesulfonic acid, C10-16-alkyl derivs. (68584-22-5) | |
|---|---|
| Mobility in soil | 1064 |

### 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.

## SECTION 14: Transport information

In accordance with DOT / TDG / IMDG / IATA

### 14.1. UN number

DOT NA No : UN2924
UN-No. (TDG) : UN2924
UN-No. (IMDG) : 2924
UN-No. (IATA) : 2924

### 14.2. UN proper shipping name

Proper Shipping Name (DOT) : Flammable liquids, corrosive, n.o.s. (Isopropanol, Sodium hydroxide)
Proper Shipping Name (TDG) : FLAMMABLE LIQUID, CORROSIVE, N.O.S. (Isopropanol, Sodium hydroxide)
Proper Shipping Name (IMDG) : FLAMMABLE LIQUID, CORROSIVE, N.O.S. (Isopropanol, Sodium hydroxide)
Proper Shipping Name (IATA) : Flammable liquid, corrosive, n.o.s. (Isopropanol, Sodium hydroxide)

### 14.3. Transport hazard class(es)

**DOT**
Transport hazard class(es) (DOT) : 3 (8)
Hazard labels (DOT) : 3, 8


**TDG**
Transport hazard class(es) (TDG) : 3 (8)
Hazard labels (TDG) : 3, 8


**IMDG**
Transport hazard class(es) (IMDG) : 3 (8)
Hazard labels (IMDG) : 3, 8


**IATA**

Transport hazard class(es) (IATA) : 3 (8)

Hazard labels (IATA) : 3, 8


## 14.4. Packing group

Packing group (DOT) : III

Packing group (TDG) : III

Packing group (IMDG) : III

Packing group (IATA) : III

## 14.5. Environmental hazards

Dangerous for the environment : Yes

Marine pollutant : Yes

Other information : Marine Pollutants packaged in single or combination packagings containing a net quantity per single or inner packaging of 5lt or less for liquids or having a net mass per single or inner packaging of 5kg or less for solids are not subject to any other provisions of this Code relevant to marine pollutants provided the packagings meet the general requirements of 4.1.1.1, 4.1.1.2, and 4.1.1.4 to 4.1.1.8. In the case of marine pollutants also meeting the criteria of inclusion in another hazards class all provisions of the Code relevant to any additional hazards continue to apply.

## 14.6. Special precautions for user

**DOT**

UN-No.(DOT) : UN2924

DOT Special Provisions (49 CFR 172.102) : B1 - If the material has a flash point at or above 38 C (100 F) and below 93 C (200 F), then the bulk packaging requirements of 173.241 of this subchapter are applicable. If the material has a flash point of less than 38 C (100 F), then the bulk packaging requirements of 173.242 of this subchapter are applicable.
IB3 - Authorized IBCs: Metal (31A, 31B and 31N); Rigid plastics (31H1 and 31H2); Composite (31HZ1 and 31HA2, 31HB2, 31HN2, 31HD2 and 31HH2). Additional Requirement: Only liquids with a vapor pressure less than or equal to 110 kPa at 50 C (1.1 bar at 122 F), or 130 kPa at 55 C (1.3 bar at 131 F) are authorized, except for UN2672 (also see Special Provision IP8 in Table 2 for UN2672).
T7 - 4 178.274(d)(2) Normal..... 178.275(d)(3)
TP1 - The maximum degree of filling must not exceed the degree of filling determined by the following: Degree of filling = 97 / 1 + a (tr - tf) Where: tr is the maximum mean bulk temperature during transport, and tf is the temperature in degrees celsius of the liquid during filling.
TP28 - A portable tank having a minimum test pressure of 2.65 bar (265 kPa) may be used provided the calculated test pressure is 2.65 bar or less based on the MAWP of the hazardous material, as defined in 178.275 of this subchapter, where the test pressure is 1.5 times the MAWP.

DOT Packaging Exceptions (49 CFR 173.xxx) : 150

| | | |
|---|---|---|
| DOT Packaging Non Bulk (49 CFR 173.xxx) | : | 203 |
| DOT Packaging Bulk (49 CFR 173.xxx) | : | 242 |
| 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 - The material may be stowed ‘‘on deck’’ or ‘‘under deck’’ on a cargo vessel and on a passenger vessel. |
| DOT Vessel Stowage Other | : | 40 - Stow ‘‘clear of living quarters’’ |

**TDG**

| | | |
|---|---|---|
| UN-No. (TDG) | : | UN2924 |
| TDG Special Provisions | : | 16 - (1) The technical name of at least one of the most dangerous substances that predominantly contributes to the danger or dangers posed by the dangerous goods must be shown, in parentheses, on the shipping document following the shipping name in accordance with clause 3.5(1)(c)(ii)(A). The technical name must also be shown, in parentheses, on a small means of containment or on a tag following the shipping name in accordance with subsections 4.11(2) and (3).<br>(2) Despite subsection (1), the technical name for the following dangerous goods is not required to be shown on a shipping document or on a small means of containment when Canadian law for domestic transport or an international convention for international transport prohibits the disclosure of the technical name:<br>(a) UN1544, ALKALOID SALTS, SOLID, N.O.S. or ALKALOIDS, SOLID, N.O.S;<br>(b) UN1851, MEDICINE, LIQUID, TOXIC, N.O.S;<br>(c) UN3140, ALKALOID SALTS, LIQUID, N.O.S. or ALKALOIDS, LIQUID, N.O.S;<br>(d) UN3248, MEDICINE, LIQUID, FLAMMABLE, TOXIC, N.O.S; or<br>(e) UN3249, MEDICINE, SOLID, TOXIC, N.O.S.<br>(3) Despite subsection (1), the technical name for the following dangerous goods is not required to be shown on a small means of containment:<br>(a) UN2814, INFECTIOUS SUBSTANCE, AFFECTING HUMANS; or<br>(b) UN2900, INFECTIOUS SUBSTANCE, AFFECTING ANIMALS. |
| Explosive Limit and Limited Quantity Index | : | 5 L |
| Excepted quantities (TDG) | : | E1 |
| Passenger Carrying Road Vehicle or Passenger Carrying Railway Vehicle Index | : | 5 L |
| Emergency Response Guide (ERG) Number | : | 132 |

**IMDG**

No data available

**IATA**

No data available

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

Not applicable

## SECTION 15: Regulatory information

### 15.1. US Federal regulations

| DECON-PHENE® PLUS | |
|---|---|
| SARA Section 311/312 Hazard Classes | Health hazard - Skin corrosion or Irritation<br>Health hazard - Serious eye damage or eye irritation<br>Health hazard - Respiratory or skin sensitization<br>Health hazard - Specific target organ toxicity (single or repeated exposure) |

| All components of this product are present and listed as Active on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory | | |
|---|---|---|
| Contains chemical(s) subject to TSCA 12b export notification if product is shipped outside the U.S | | |
| Sodium nitrite | CAS-No. 7632-00-0 | 0.1 - 1% |

| 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 | 1 - 5% |
| Sodium nitrite | CAS-No. 7632-00-0 | 0.1 - 1% |
| Ethylene glycol | CAS-No. 107-21-1 | 1 - 5% |
| Biphenyl-2-ol (ortho-phenylphenol) | CAS-No. 90-43-7 | 10-15% |

| **Sodium hydroxide (1310-73-2)** | |
|---|---|
| CERCLA RQ | 1000 lb |

| **Sodium nitrite (7632-00-0)** | |
|---|---|
| CERCLA RQ | 100 lb |

| **Ethylene glycol (107-21-1)** | |
|---|---|
| Listed on EPA Hazardous Air Pollutant (HAPS) | |
| CERCLA RQ | 5000 lb |

### 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) |

| **Sulfuric acid, mono-C10-16-alkyl esters, sodium salts (68585-47-7)** |
|---|
| Listed on the Canadian DSL (Domestic Substances List) |

| **Tetrasodium ethylene diamine tetraacetate (64-02-8)** |
|---|
| Listed on the Canadian DSL (Domestic Substances List) |

| **Sodium hydroxide (1310-73-2)** |
|---|
| Listed on the Canadian DSL (Domestic Substances List) |

| **Sodium nitrite (7632-00-0)** |
|---|
| Listed on the Canadian DSL (Domestic Substances List) |

| Ethylene glycol (107-21-1) |
|---|
| Listed on the Canadian DSL (Domestic Substances List) |

| Sodium xylenesulphonate (1300-72-7) |
|---|
| Listed on the Canadian DSL (Domestic Substances List) |

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

### EU-Regulations

No additional information available

### National regulations

| Tetrasodium ethylene diamine tetraacetate (64-02-8) |
|---|
| Listed on INSQ (Mexican National Inventory of Chemical Substances) |

| Sodium hydroxide (1310-73-2) |
|---|
| Listed on INSQ (Mexican National Inventory of Chemical Substances) |

| Sodium xylenesulphonate (1300-72-7) |
|---|
| Listed on INSQ (Mexican National Inventory of Chemical Substances) |

## 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 |
| Sodium hydroxide(1310-73-2) | 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 |
| Sodium nitrite(7632-00-0) | 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 |
| Ethylene glycol(107-21-1) | 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 |

## SECTION 16: Other information

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

Revision date : 6/12/2024

Data sources : US OSHA HazCom (GHS) 25 May 2012. NFPA 704, 2022 edition. ECHA (European Chemicals Agency), http://echa.europa.eu/.

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: 68959-13. 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 |
| H272 | May intensify fire; oxidizer |
| H290 | May be corrosive to metals |
| H301 | Toxic if swallowed |
| 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 |

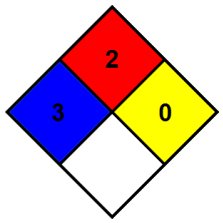
| **Abbreviations and acronyms** | |
|---|---|
| | ACGIH (American Conference of Government Industrial Hygienists) |
| | ATE (Acute Toxicity Estimate) |
| | CAS (Chemical Abstracts Service) number |
| | EC50 (Effective Concentration 50%) |
| | IARC (International Agency for Research on Cancer) |
| | IATA (International Air Transport Association) |
| | IMDG (International Maritime Dangerous Goods Code) |
| | IMO (International Maritime Organisation) |
| | LC50 (Lethal Concentration 50%) |

| Abbreviations and acronyms | |
|---|---|
| | LD50 (Lethal Dose 50%) |
| | OECD (Organisation for Economic Co-operation and Development) |
| | OSHA (Occupational Safety and Health Administration) (US) |
| | PBT (Persistent, Bioaccumulative and Toxic) |
| | QSAR (Quantitative Structure-Activity Relationship) |
| | SADT (Self-Accelerating Decomposition Temperature) |
| | 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.




| Indication of changes: | | | |
|---|---|---|---|
| **Section** | **Changed item** | **Change** | **Comments** |
| 1 | Recommended uses and restrictions | Modified | No additional information available |
| 15 | State or local regulations | Modified | California Proposition 65 |