# SAFETY DATA SHEET

## Section 1. Identification

<table>
<thead>
<tr>
<th>Product identifier</th>
<th>DURATION® Exterior Acrylic Latex Flat - Extra White</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product code</td>
<td>K32W251</td>
</tr>
<tr>
<td>Other means of identification</td>
<td>Not available.</td>
</tr>
<tr>
<td>Product type</td>
<td>Liquid.</td>
</tr>
</tbody>
</table>

**Recommended use of the chemical and restrictions on use**

Not applicable.

**Supplier's details**

The Sherwin-Williams Company  
101 W. Prospect Avenue  
Cleveland, OH 44115

**Emergency telephone number**

+1 703-741-5970 (Jamaica, El Salvador, Guyana, Belize)  
+(1) 868-224-5716 (Trinidad-Tobago)

**e-mail address of person responsible for this SDS**

sds@sherwin.com

## Section 2. Hazard identification

**Classification of the substance or mixture**

- SKIN SENSITIZATION - Category 1  
- TOXIC TO REPRODUCTION - Category 2  
- SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 1  
- AQUATIC HAZARD (ACUTE) - Category 2  
- AQUATIC HAZARD (LONG-TERM) - Category 2

**Percentage of the mixture consisting of ingredient(s) of unknown hazards to the aquatic environment:** 1.2%

**GHS label elements**

**Hazard pictograms**

| ![Hazard pictogram](image)
| ---

**Signal word**

Danger

**Hazard statements**

- May cause an allergic skin reaction.  
- Suspected of damaging fertility or the unborn child.  
- Causes damage to organs through prolonged or repeated exposure. (respiratory tract)  
- Toxic to aquatic life with long lasting effects.

**Precautionary statements**

**General**

Keep out of reach of children. If medical advice is needed, have product container or label at hand.

**Prevention**

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves, protective clothing, eye protection, face protection, or hearing protection. Avoid release to the environment. Do not breathe vapor. Do not eat, drink or smoke when using this product. Wash thoroughly after handling.

**Response**

Collect spillage. IF exposed or concerned: Get medical advice or attention. Take off contaminated clothing and wash it before reuse. IF ON SKIN: Wash with plenty of water. If skin irritation or rash occurs: Get medical advice or attention.

**Storage**

Store locked up.
Section 2. Hazard identification

Disposal: Dispose of contents and container in accordance with all local, regional, national and international regulations.

Other hazards which do not result in classification: Please refer to the SDS for additional information.

Section 3. Composition/information on ingredients

Substance/mixture: Mixture

Other means of identification: Not available.

<table>
<thead>
<tr>
<th>Ingredient name</th>
<th>%</th>
<th>CAS number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zinc Oxide</td>
<td>≤5</td>
<td>1314-13-2</td>
</tr>
<tr>
<td>Cristobalite, respirable powder</td>
<td>≤3</td>
<td>14464-46-1</td>
</tr>
<tr>
<td>Bis(pentamethyl-4-piperidyl)sebacate</td>
<td>≤0.3</td>
<td>41556-26-7</td>
</tr>
<tr>
<td>Diuron</td>
<td>&lt;0.1</td>
<td>330-54-1</td>
</tr>
<tr>
<td>Carbendazim</td>
<td>&lt;0.1</td>
<td>10605-21-7</td>
</tr>
<tr>
<td>3-Iodo-2-propynyl Butyl Carbamate</td>
<td>≤0.042</td>
<td>55406-53-6</td>
</tr>
<tr>
<td>Zinc Pyrithione</td>
<td>&lt;0.01</td>
<td>13463-41-7</td>
</tr>
<tr>
<td>Zinc Pyrithione</td>
<td>≤0.0045</td>
<td>13463-41-7</td>
</tr>
</tbody>
</table>

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necessary first aid measures

Eye contact: Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention following exposure or if feeling unwell.

Inhalation: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Skin contact: Wash with plenty of soap and water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Get medical attention. In the event of any complaints or symptoms, avoid further exposure. Wash clothing before reuse. Clean shoes thoroughly before reuse.

Ingestion: Wash out mouth with water. Remove dentures if any. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
Section 4. First aid measures

Most important symptoms/effects, acute and delayed

Potential acute health effects

Eye contact : No known significant effects or critical hazards.
Inhalation : No known significant effects or critical hazards.
Skin contact : May cause an allergic skin reaction.
Ingestion : No known significant effects or critical hazards.

Over-exposure signs/symptoms

Eye contact : No specific data.
Inhalation : Adverse symptoms may include the following:
- reduced fetal weight
- increase in fetal deaths
- skeletal malformations
Skin contact : Adverse symptoms may include the following:
- irritation
- redness
- reduced fetal weight
- increase in fetal deaths
- skeletal malformations
Ingestion : Adverse symptoms may include the following:
- reduced fetal weight
- increase in fetal deaths
- skeletal malformations

Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
Specific treatments : No specific treatment.
Protection of first-aiders : No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media : Use an extinguishing agent suitable for the surrounding fire.
Unsuitable extinguishing media : None known.

Specific hazards arising from the chemical

Hazardous thermal decomposition products : Decomposition products may include the following materials:
- metal oxide/oxides

Special protective actions for fire-fighters

Special protective equipment for fire-fighters : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

For emergency responders: If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

Environmental precautions: Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities. Collect spillage.

Methods and materials for containment and cleaning up

Small spill: Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

Large spill: Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Section 7. Handling and storage

Precautions for safe handling

Protective measures: Put on appropriate personal protective equipment (see Section 8). Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Avoid exposure - obtain special instructions before use. Avoid exposure during pregnancy. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. Avoid release to the environment. If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.

Advice on general occupational hygiene: Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

Conditions for safe storage, including any incompatibilities: Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.
**Section 8. Exposure controls/personal protection**

### Control parameters

#### Occupational exposure limits

<table>
<thead>
<tr>
<th>Ingredient name</th>
<th>Exposure limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zinc Oxide</td>
<td>ACGIH TLV (United States, 1/2023). TWA: 2 mg/m³ 8 hours. Form: Respirable fraction</td>
</tr>
<tr>
<td>Cristobalite, respirable powder</td>
<td>STEL: 10 mg/m³ 15 minutes. Form: Respirable fraction</td>
</tr>
<tr>
<td>diuron (ISO)</td>
<td>ACGIH TLV (United States, 1/2023). [Silica, crystalline] TWA: 0.025 mg/m³ 8 hours. Form: Respirable fraction</td>
</tr>
</tbody>
</table>

#### Biological exposure indices

No exposure indices known.

### Appropriate engineering controls

- If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

### Environmental exposure controls

- Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

### Individual protection measures

#### Hygiene measures

- Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period.
- Appropriate techniques should be used to remove potentially contaminated clothing. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

#### Eye/face protection

- Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields.

#### Skin protection

- Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

#### Hand protection

- Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

#### Body protection

- Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

#### Respiratory protection

- Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.
Section 9. Physical and chemical properties and safety characteristics

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

**Appearance**
- **Physical state**: Liquid.
- **Color**: Not available.
- **Odor**: Not available.
- **Odor threshold**: Not available.
- **pH**: 9.5
- **Melting point/freezing point**: Not available.
- **Boiling point, initial boiling point, and boiling range**: 100°C (212°F)
- **Flash point**: Closed cup: Not applicable.
- **Evaporation rate**: 0.09 (butyl acetate = 1)
- **Flammability**: Not available.
- **Lower and upper explosion limit/flammability limit**: Not available.
- **Vapor pressure**: 2.3 kPa (17.5 mm Hg)
- **Relative vapor density**: 1 [Air = 1]
- **Relative density**: 1.37
- **Solubility(ies)**:

<table>
<thead>
<tr>
<th>Media</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>cold water</td>
<td>Partially soluble</td>
</tr>
</tbody>
</table>

- **Partition coefficient: n-octanol/water**: Not applicable.
- **Auto-ignition temperature**: Not available.
- **Decomposition temperature**: Not available.
- **Viscosity**: Kinematic (40°C (104°F)): >20.5 mm²/s (>20.5 cSt)
- **Flow time (ISO 2431)**: Not available.
- **Heat of combustion**: 1.384 kJ/g

Section 10. Stability and reactivity

- **Reactivity**: No specific test data related to reactivity available for this product or its ingredients.
- **Chemical stability**: The product is stable.
- **Possibility of hazardous reactions**: Under normal conditions of storage and use, hazardous reactions will not occur.
- **Conditions to avoid**: No specific data.
- **Incompatible materials**: No specific data.
- **Hazardous decomposition products**: Under normal conditions of storage and use, hazardous decomposition products should not be produced.
**Section 11. Toxicological information**

**Information on toxicological effects**

**Acute toxicity**

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Result</th>
<th>Species</th>
<th>Dose</th>
<th>Exposure</th>
</tr>
</thead>
<tbody>
<tr>
<td>diuron (ISO)</td>
<td>LD50 Dermal</td>
<td>Rat</td>
<td>&gt;5 g/kg</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>LD50 Oral</td>
<td>Rat</td>
<td>1 g/kg</td>
<td>-</td>
</tr>
<tr>
<td>Carbendazim</td>
<td>LD50 Dermal</td>
<td>Rabbit</td>
<td>8500 mg/kg</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>LD50 Oral</td>
<td>Rat</td>
<td>2 g/kg</td>
<td>-</td>
</tr>
<tr>
<td>3-iodo-2-propynyl</td>
<td>LD50 Oral</td>
<td>Rat</td>
<td>&gt;5050 mg/kg</td>
<td>-</td>
</tr>
<tr>
<td>butylcarbamate</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Zinc Pyrithione</td>
<td>LC50 Inhalation Vapor</td>
<td>Rat</td>
<td>140 mg/m³</td>
<td>4 hours</td>
</tr>
<tr>
<td></td>
<td>LD50 Dermal</td>
<td>Rabbit</td>
<td>100 mg/kg</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>LD50 Oral</td>
<td>Rat</td>
<td>177 mg/kg</td>
<td>-</td>
</tr>
<tr>
<td>Zinc Pyrithione</td>
<td>LC50 Inhalation Vapor</td>
<td>Rat</td>
<td>140 mg/m³</td>
<td>4 hours</td>
</tr>
<tr>
<td></td>
<td>LD50 Dermal</td>
<td>Rabbit</td>
<td>100 mg/kg</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>LD50 Oral</td>
<td>Rat</td>
<td>177 mg/kg</td>
<td>-</td>
</tr>
</tbody>
</table>

**Irritation/Corrosion**

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Result</th>
<th>Species</th>
<th>Score</th>
<th>Exposure</th>
<th>Observation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zinc Oxide</td>
<td>Eyes - Mild irritant</td>
<td>Rabbit</td>
<td>-</td>
<td>24 hours 500 mg</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Skin - Mild irritant</td>
<td>Rabbit</td>
<td>-</td>
<td>24 hours 500 mg</td>
<td>-</td>
</tr>
</tbody>
</table>

**Sensitization**
Not available.

**Mutagenicity**
Not available.

**Carcinogenicity**
Not available.

**Reproductive toxicity**
Not available.

**Teratogenicity**
Not available.

**Specific target organ toxicity (single exposure)**
Not available.

**Specific target organ toxicity (repeated exposure)**

<table>
<thead>
<tr>
<th>Name</th>
<th>Category</th>
<th>Route of exposure</th>
<th>Target organs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cristobalite, respirable powder</td>
<td>Category 1</td>
<td>inhalation</td>
<td>respiratory tract</td>
</tr>
<tr>
<td>diuron (ISO)</td>
<td>Category 2</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>3-iodo-2-propynyl butylcarbamate</td>
<td>Category 1</td>
<td>-</td>
<td>larynx</td>
</tr>
<tr>
<td>Zinc Pyrithione</td>
<td>Category 1</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Zinc Pyrithione</td>
<td>Category 1</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

**Aspiration hazard**
Not available.

**Information on the likely routes of exposure**

**Potential acute health effects**

**Date of issue/Date of revision**: 9/16/2023  
**Date of previous issue**: 8/7/2023  
**Version**: 9.01  
**Date**: 7/12
Section 11. Toxicological information

Ear contact: No known significant effects or critical hazards.
Inhalation: No known significant effects or critical hazards.
Skin contact: May cause an allergic skin reaction.
Ingestion: No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact: No specific data.
Inhalation: Adverse symptoms may include the following:
- reduced fetal weight
- increase in fetal deaths
- skeletal malformations
Skin contact: Adverse symptoms may include the following:
- irritation
- redness
- reduced fetal weight
- increase in fetal deaths
- skeletal malformations
Ingestion: Adverse symptoms may include the following:
- reduced fetal weight
- increase in fetal deaths
- skeletal malformations

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure
Potential immediate effects: Not available.
Potential delayed effects: Not available.

Long term exposure
Potential immediate effects: Not available.
Potential delayed effects: Not available.

Potential chronic health effects
Not available.

General: Causes damage to organs through prolonged or repeated exposure. Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.
Carcinogenicity: No known significant effects or critical hazards.
Mutagenicity: No known significant effects or critical hazards.
Reproductive toxicity: Suspected of damaging fertility or the unborn child.

Numerical measures of toxicity

Acute toxicity estimates

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Oral (mg/kg)</th>
<th>Dermal (mg/kg)</th>
<th>Inhalation (gases) (ppm)</th>
<th>Inhalation (vapors) (mg/l)</th>
<th>Inhalation (dusts and mists) (mg/l)</th>
</tr>
</thead>
<tbody>
<tr>
<td>diuron (ISO)</td>
<td>1000</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Carbenazim</td>
<td>N/A</td>
<td>2000</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>3-iodo-2-propynyl butylcarbamate</td>
<td>1470</td>
<td>N/A</td>
<td>N/A</td>
<td>3</td>
<td>N/A</td>
</tr>
<tr>
<td>Zinc Pyrithione</td>
<td>221</td>
<td>100</td>
<td>N/A</td>
<td>0.14</td>
<td>0.14</td>
</tr>
<tr>
<td>Zinc Pyrithione</td>
<td>221</td>
<td>100</td>
<td>N/A</td>
<td>0.14</td>
<td>0.14</td>
</tr>
</tbody>
</table>

Date of issue/Date of revision: 9/16/2023
Date of previous issue: 8/7/2023
Version: 9.01

SHW-A4-UN-GHS - TT
## Section 11. Toxicological information

### Toxicity

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Result</th>
<th>Species</th>
<th>Exposure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zinc Oxide</td>
<td>Acute IC50 1.85 mg/l Marine water</td>
<td>Algae - Skeletonema costatum</td>
<td>96 hours</td>
</tr>
<tr>
<td></td>
<td>Acute LC50 98 µg/l Fresh water</td>
<td>Daphnia - Daphnia magna - Neonate</td>
<td>48 hours</td>
</tr>
<tr>
<td></td>
<td>Acute LC50 1.1 ppm Fresh water</td>
<td>Fish - Oncorhynchus mykiss</td>
<td>96 hours</td>
</tr>
<tr>
<td></td>
<td>Acute EC50 0.0013 mg/l Fresh water</td>
<td>Algae - Chlorella pyrenoidosa</td>
<td>96 hours</td>
</tr>
<tr>
<td></td>
<td>Acute EC50 2.26 µg/l Marine water</td>
<td>Algae - Coccolithus huxleyi - Exponential growth phase</td>
<td>72 hours</td>
</tr>
<tr>
<td></td>
<td>Acute EC50 0.005 mg/l Fresh water</td>
<td>Aquatic plants - Lemna sp.</td>
<td>96 hours</td>
</tr>
<tr>
<td></td>
<td>Acute EC50 7.2 mg/l Fresh water</td>
<td>Daphnia - Daphnia magna - Neonate</td>
<td>48 hours</td>
</tr>
<tr>
<td></td>
<td>Acute IC50 2.41 µg/l Marine water</td>
<td>Aquatic plants - Halodule uninervis</td>
<td>72 hours</td>
</tr>
<tr>
<td></td>
<td>Acute LC50 380 µg/l Fresh water</td>
<td>Crustaceans - Gammarus lacustris</td>
<td>48 hours</td>
</tr>
<tr>
<td></td>
<td>Acute LC50 500 µg/l Fresh water</td>
<td>Fish - Morone saxatilis - Larvae</td>
<td>96 hours</td>
</tr>
<tr>
<td></td>
<td>Chronic EC10 0.11 µg/l Fresh water</td>
<td>Algae - Fragilaria capucina - Exponential growth phase</td>
<td>96 hours</td>
</tr>
<tr>
<td></td>
<td>Chronic NOEC 0.34 µg/l Marine water</td>
<td>Aquatic plants - Zostera muelleri var. acutus</td>
<td>72 hours</td>
</tr>
<tr>
<td></td>
<td>Chronic NOEC 26.4 ppb</td>
<td>Fish - Pimephales promelas</td>
<td>60 days</td>
</tr>
<tr>
<td></td>
<td>Acute LC50 19.0562 mg/l Fresh water</td>
<td>Algae - Scenedesmus acutus</td>
<td>96 hours</td>
</tr>
<tr>
<td></td>
<td>Acute EC50 20 µg/l Fresh water</td>
<td>Daphnia - Daphnia magna</td>
<td>48 hours</td>
</tr>
<tr>
<td></td>
<td>Acute LC50 77 µg/l Fresh water</td>
<td>Crustaceans - Gammarus pulex - Juvenile (Fledgling, Hatchling, Weaning)</td>
<td>48 hours</td>
</tr>
<tr>
<td></td>
<td>Acute LC50 7 µg/l Fresh water</td>
<td>Fish - Ictalurus punctatus - Yolk-sac fry</td>
<td>96 hours</td>
</tr>
<tr>
<td></td>
<td>Chronic EC10 10 µg/l Fresh water</td>
<td>Crustaceans - Gammarus pulex - Adult</td>
<td>21 days</td>
</tr>
<tr>
<td></td>
<td>Chronic NOEC 3.1 ppb Fresh water</td>
<td>Daphnia - Daphnia magna</td>
<td>21 days</td>
</tr>
<tr>
<td></td>
<td>Acute LC50 500 ppb Fresh water</td>
<td>Crustaceans - Hyalella azteca</td>
<td>48 hours</td>
</tr>
<tr>
<td></td>
<td>Acute LC50 40 ppb Fresh water</td>
<td>Daphnia - Daphnia magna</td>
<td>48 hours</td>
</tr>
<tr>
<td></td>
<td>Acute LC50 67 µg/l Fresh water</td>
<td>Fish - Oncorhynchus mykiss - Juvenile (Fledgling, Hatchling, Weaning)</td>
<td>96 hours</td>
</tr>
<tr>
<td></td>
<td>Chronic NOEC 8.4 ppb</td>
<td>Fish - Pimephales promelas</td>
<td>35 days</td>
</tr>
<tr>
<td></td>
<td>Acute EC50 0.51 µg/l Marine water</td>
<td>Algae - Thalassiosira pseudonana</td>
<td>96 hours</td>
</tr>
<tr>
<td></td>
<td>Acute EC50 38 µg/l Fresh water</td>
<td>Crustaceans - Ilyocypris dentifera</td>
<td>48 hours</td>
</tr>
<tr>
<td></td>
<td>Acute EC50 8.25 ppb Fresh water</td>
<td>Daphnia - Daphnia magna</td>
<td>48 hours</td>
</tr>
<tr>
<td></td>
<td>Acute LC50 2.68 ppb Fresh water</td>
<td>Fish - Pimephales promelas</td>
<td>96 hours</td>
</tr>
<tr>
<td></td>
<td>Chronic EC10 0.36 µg/l Marine water</td>
<td>Algae - Thalassiosira pseudonana</td>
<td>96 hours</td>
</tr>
<tr>
<td></td>
<td>Chronic NOEC 2.7 ppb Fresh water</td>
<td>Daphnia - Daphnia magna</td>
<td>21 days</td>
</tr>
<tr>
<td></td>
<td>Acute EC50 0.51 µg/l Marine water</td>
<td>Algae - Thalassiosira pseudonana</td>
<td>96 hours</td>
</tr>
<tr>
<td></td>
<td>Acute EC50 38 µg/l Fresh water</td>
<td>Crustaceans - Ilyocypris dentifera</td>
<td>48 hours</td>
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<tr>
<td></td>
<td>Acute EC50 8.25 ppb Fresh water</td>
<td>Daphnia - Daphnia magna</td>
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<td></td>
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<tr>
<td></td>
<td>Chronic EC10 0.36 µg/l Marine water</td>
<td>Algae - Thalassiosira pseudonana</td>
<td>96 hours</td>
</tr>
<tr>
<td></td>
<td>Chronic NOEC 2.7 ppb Fresh water</td>
<td>Daphnia - Daphnia magna</td>
<td>21 days</td>
</tr>
</tbody>
</table>

---

**Date of issue/Date of revision**: 9/16/2023  **Date of previous issue**: 8/7/2023  **Version**: 9.01
Section 12. Ecological information

**Persistence and degradability**
Not available.

**Bioaccumulative potential**

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>LogP&lt;sub&gt;ow&lt;/sub&gt;</th>
<th>BCF</th>
<th>Potential</th>
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<tbody>
<tr>
<td>Zinc Oxide</td>
<td>-</td>
<td>28960</td>
<td>High</td>
</tr>
<tr>
<td>diuron (ISO)</td>
<td>-</td>
<td>5.2</td>
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</tr>
<tr>
<td>Carbendazim</td>
<td>-</td>
<td>2.51</td>
<td>Low</td>
</tr>
<tr>
<td>Zinc Pyrithione</td>
<td>-</td>
<td>11</td>
<td>Low</td>
</tr>
<tr>
<td>Zinc Pyrithione</td>
<td>-</td>
<td>11</td>
<td>Low</td>
</tr>
</tbody>
</table>

**Mobility in soil**

Soil/water partition coefficient (K<sub>OC</sub>) : Not available.

**Other adverse effects** : No known significant effects or critical hazards.

Section 13. Disposal considerations

**Disposal methods** : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

<table>
<thead>
<tr>
<th>UN number</th>
<th>UN proper shipping name</th>
<th>UN proper shipping name</th>
<th>UN proper shipping name</th>
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<tbody>
<tr>
<td>UN3082</td>
<td>ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Zinc Oxide, Diuron)</td>
<td>ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Zinc Oxide, Diuron)</td>
<td>ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Zinc Oxide, Diuron)</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Transport hazard class(es)</th>
<th>UN</th>
<th>IMDG</th>
<th>IATA</th>
</tr>
</thead>
<tbody>
<tr>
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<td>9</td>
<td>9</td>
<td>9</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Packing group</th>
<th>UN</th>
<th>IMDG</th>
<th>IATA</th>
</tr>
</thead>
<tbody>
<tr>
<td>III</td>
<td>Yes.</td>
<td>Yes.</td>
<td>Yes.</td>
</tr>
</tbody>
</table>

Additional information

UN : This product is not regulated as a dangerous good when transported in sizes of ≤5 L or ≤5 kg, provided the packagings meet the general provisions of 4.1.1.1, 4.1.1.2 and 4.1.1.4 to 4.1.1.8.
Section 14. Transport information

**IMDG**

This product is not regulated as a dangerous good when transported in sizes of ≤5 L or ≤5 kg, provided the packagings meet the general provisions of 4.1.1.1, 4.1.1.2 and 4.1.1.4 to 4.1.1.8.

**Emergency schedules** F-A, S-F

**IATA**

This product is not regulated as a dangerous good when transported in sizes of ≤5 L or ≤5 kg, provided the packagings meet the general provisions of 5.0.2.4.1, 5.0.2.6.1.1 and 5.0.2.8.

**Special precautions for user**

Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Transport in bulk according to IMO instruments: Not available.

Section 15. Regulatory information

**International regulations**

**Chemical Weapon Convention List Schedules I, II & III Chemicals**

Not listed.

**Montreal Protocol**

Not listed.

**Stockholm Convention on Persistent Organic Pollutants**

Not listed.

**Rotterdam Convention on Prior Informed Consent (PIC)**

Not listed.

**UNECE Aarhus Protocol on POPs and Heavy Metals**

Not listed.

**Inventory list**

Australia: Not determined.
Canada: Not determined.
China: Not determined.

Eurasian Economic Union: Russian Federation inventory: Not determined.

Japan: Japan inventory (CSCL): Not determined.
      Japan inventory (ISHL): Not determined.

New Zealand: Not determined.
Philippines: Not determined.
Republic of Korea: Not determined.
Taiwan: Not determined.
Thailand: Not determined.
Turkey: Not determined.
United States: Not determined.
Viet Nam: Not determined.
Section 16. Other information

History

Date of printing : 9/16/2023
Date of issue/Date of revision : 9/16/2023
Date of previous issue : 8/7/2023
Version : 9.01

Key to abbreviations : ATE = Acute Toxicity Estimate
BCF = Bioconcentration Factor
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
IATA = International Air Transport Association
IBC = Intermediate Bulk Container
IMDG = International Maritime Dangerous Goods
LogPow = logarithm of the octanol/water partition coefficient
N/A = Not available
SGG = Segregation Group
UN = United Nations

Procedure used to derive the classification

<table>
<thead>
<tr>
<th>Classification</th>
<th>Justification</th>
</tr>
</thead>
<tbody>
<tr>
<td>SKIN SENSITIZATION - Category 1</td>
<td>Calculation method</td>
</tr>
<tr>
<td>TOXIC TO REPRODUCTION - Category 2</td>
<td>Calculation method</td>
</tr>
<tr>
<td>SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 1</td>
<td>Calculation method</td>
</tr>
<tr>
<td>AQUATIC HAZARD (ACUTE) - Category 2</td>
<td>Calculation method</td>
</tr>
<tr>
<td>AQUATIC HAZARD (LONG-TERM) - Category 2</td>
<td>Calculation method</td>
</tr>
</tbody>
</table>

Notice to reader

It is recommended that each customer or recipient of this Safety Data Sheet (SDS) study it carefully and consult resources, as necessary or appropriate, to become aware of and understand the data contained in this SDS and any hazards associated with the product. This information is provided in good faith and believed to be accurate as of the effective date herein. However, no warranty, express or implied, is given. The information presented here applies only to the product as shipped. The addition of any material can change the composition, hazards and risks of the product. Products shall not be repackaged, modified, or tinted except as specifically instructed by the manufacturer, including but not limited to the incorporation of products not specified by the manufacturer, or the use or addition of products in proportions not specified by the manufacturer. Regulatory requirements are subject to change and may differ between various locations and jurisdictions. The customer/buyer/user is responsible to ensure that his activities comply with all country, federal, state, provincial or local laws. The conditions for use of the product are not under the control of the manufacturer; the customer/buyer/user is responsible to determine the conditions necessary for the safe use of this product. The customer/buyer/user should not use the product for any purpose other than the purpose shown in the applicable section of this SDS without first referring to the supplier and obtaining written handling instructions. Due to the proliferation of sources for information such as manufacturer-specific SDS, the manufacturer cannot be responsible for SDSs obtained from any other source.