SAFETY DATA SHEET

A6W151

Section 1. Identification

Product identifier : A-100® Exterior Acrylic Latex Flat - Extra White

Product code : A6W151 Other means of : Not available.

identification

Product type : Liquid.

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

: 000-800-100-7141 (India) (800) 968-793 (Hong Kong) +(965) 22274681 (Kuwait)

+(972) 37630639 (Israel, Tel Aviv) +1 703-741-5970 (Saudi Arabia, UAE)

e-mail address of person responsible for this SDS

: sds@sherwin.com

Section 2. Hazard identification

Classification of the : AQUATIC HAZARD (ACUTE) - Category 2 AQUATIC HAZARD (LONG-TERM) - Category 2 substance or mixture

GHS label elements

Hazard pictograms



Signal word : No signal word.

Hazard statements : Toxic to aquatic life with long lasting effects.

Precautionary statements

General : Read carefully and follow all instructions. Keep out of reach of children. If medical

advice is needed, have product container or label at hand.

Prevention : Avoid release to the environment.

Response : Collect spillage. **Storage** : Not applicable.

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

and international regulations.

result in classification

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

Date of issue/Date of revision : 4/25/2024 : 4/18/2024 1/12 Date of previous issue Version: 9.02

Section 3. Composition/information on ingredients

Substance/mixture
Other means of
identification

: Mixture: Not available.

Ingredient name	%	CAS number
Zinc Oxide	≤3	1314-13-2
Octylphenoxypoly(ethoxy)ethanol	<1	9036-19-5
Diuron	<0.1	330-54-1
Carbendazim	≤0.083	10605-21-7
2-Methyl-4-isothiazolin-3-one	≤0.052	2682-20-4
Zinc Pyrithione	≤0.045	13463-41-7
Zinc Pyrithione	≤0.0049	13463-41-7

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. Get medical attention if irritation

occurs.

Inhalation : Remove victim to fresh air and keep at rest in a position comfortable for breathing.

Skin contact: Flush contaminated skin with plenty of water. Remove contaminated clothing and

shoes. Get medical attention if symptoms occur.

Ingestion: Wash out mouth with water. If material has been swallowed and the exposed

person is conscious, give small quantities of water to drink. Do not induce vomiting

unless directed to do so by medical personnel.

Most important symptoms/effects, acute and delayed

Potential acute health effects

Eye contact
 Inhalation
 No known significant effects or critical hazards.
 Skin contact
 Ingestion
 No known significant effects or critical hazards.
 No known significant effects or critical hazards.
 No known significant effects or critical hazards.

Over-exposure signs/symptoms

Eye contact: No specific data.Inhalation: No specific data.Skin contact: No specific data.Ingestion: No specific data.

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.

Date of issue/Date of revision : 4/25/2024 Date of previous issue : 4/18/2024 Version : 9.02 2/12

Section 4. First aid measures

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

: In a fire or if heated, a pressure increase will occur and the container may burst. This material is toxic to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.

Hazardous thermal decomposition products : Decomposition products may include the following materials: carbon dioxide carbon monoxide metal oxide/oxides

Special protective actions for fire-fighters

: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

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

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. 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.

Date of issue/Date of revision : 4/25/2024 Date of previous issue : 4/18/2024 Version: 9.02 3/12

Section 7. Handling and storage

Precautions for safe handling

Protective measures

: Put on appropriate personal protective equipment (see Section 8). Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapor or mist. Avoid release to the environment. 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. 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

Ingredient name	Exposure limits
Zinc Oxide	ACGIH TLV (United States, 1/2023). TWA: 2 mg/m³ 8 hours. Form: Respirable fraction STEL: 10 mg/m³ 15 minutes. Form: Respirable fraction
diuron (ISO)	ACGIH TLV (United States, 1/2023). TWA: 10 mg/m³ 8 hours.

Biological exposure indices

No exposure indices known.

Appropriate engineering controls

ıre

: Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

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.

<u>Individual protection measures</u>

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. 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

Date of issue/Date of revision : 4/25/2024 Date of previous issue : 4/18/2024 Version : 9.02 4/12 SHW-A4-UN-GHS - AE

Section 8. Exposure controls/personal protection

Hand 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.

Body 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.

Other skin 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 : White.

Odor : Not available. : Not available. **Odor threshold**

pΗ • q

Melting point/freezing point : Not available. Boiling point, initial boiling point, and boiling range

: 100°C (212°F)

Flash point : Closed cup: Not applicable. : 0.09 (butyl acetate = 1) **Evaporation rate**

: Not available. **Flammability** Lower and upper explosion

limit/flammability limit

: Not available.

: 2.3 kPa (17.5 mm Hg) Vapor pressure

Relative vapor density : 1 [Air = 1] : 1.32 Relative density Solubility(ies)

"	ordonity(les) .				
	Media	Result			
	cold water	Partially soluble			

Partition coefficient: noctanol/water

: Not applicable.

Auto-ignition temperature

: Not available. : Not available.

Decomposition temperature Viscosity

: Kinematic (40°C (104°F)): >20.5 mm²/s (>20.5 cSt)

Flow time (ISO 2431) : Not available. **Heat of combustion** : 1.206 kJ/g

Date of issue/Date of revision : 4/25/2024 Date of previous issue : 4/18/2024 Version: 9.02 5/12

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

Product/ingredient name	Result	Species	Dose	Exposure
Octylphenoxypoly(ethoxy) ethanol	LD50 Oral	Rat	4190 mg/kg	-
diuron (ISO)	LD50 Dermal	Rat	>5 g/kg	-
, ,	LD50 Oral	Rat	1 g/kg	-
Carbendazim	LD50 Dermal	Rabbit	8500 mg/kg	-
	LD50 Dermal	Rat	2 g/kg	-
	LD50 Oral	Rat	>5050 mg/kg	-
Zinc Pyrithione	LC50 Inhalation Vapor	Rat	140 mg/m ³	4 hours
-	LD50 Dermal	Rabbit	100 mg/kg	-
	LD50 Oral	Rat	177 mg/kg	-
Zinc Pyrithione	LC50 Inhalation Vapor	Rat	140 mg/m ³	4 hours
-	LD50 Dermal	Rabbit	100 mg/kg	-
	LD50 Oral	Rat	177 mg/kg	-

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
Zinc Oxide	Eyes - Mild irritant	Rabbit	-	24 hours 500	-
	Skin - Mild irritant	Rabbit	-	mg 24 hours 500	-
Octylphenoxypoly(ethoxy) ethanol	Eyes - Mild irritant	Rabbit	-	mg 15 mg	-
ethanoi	Eyes - Severe irritant	Rabbit	-	1 %	-

Sensitization

Not available.

Mutagenicity

Not available.

Carcinogenicity

Not available.

Reproductive toxicity

Not available.

Teratogenicity

Not available.

Date of issue/Date of revision: 4/25/2024Date of previous issue: 4/18/2024Version: 9.026/12

Section 11. Toxicological information

Specific target organ toxicity (single exposure)

Not available.

Specific target organ toxicity (repeated exposure)

Name	•	Route of exposure	Target organs
diuron (ISO)	Category 2	-	-
Zinc Pyrithione	Category 1	-	-
Zinc Pyrithione	Category 1	-	-

Aspiration hazard

Not available.

Information on the likely routes of exposure

: Not available.

Potential acute health effects

Eye contact
 Inhalation
 No known significant effects or critical hazards.
 Skin contact
 No known significant effects or critical hazards.
 Ingestion
 No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact : No specific data.
Inhalation : No specific data.
Skin contact : No specific data.
Ingestion : No specific data.

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

Short term exposure

Potential immediate : Not available.

effects

Potential delayed effects : Not available.

Long term exposure

Potential immediate : Not available.

effects

Potential delayed effects : Not available.

Potential chronic health effects

Not available.

General : No known significant effects or critical hazards.
 Carcinogenicity : No known significant effects or critical hazards.
 Mutagenicity : No known significant effects or critical hazards.
 Reproductive toxicity : No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

Date of issue/Date of revision : 4/25/2024 Date of previous issue : 4/18/2024 Version : 9.02 7/12

Section 11. Toxicological information

Product/ingredient name	Oral (mg/ kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapors) (mg/l)	Inhalation (dusts and mists) (mg/l)
Octylphenoxypoly(ethoxy)ethanol	500	N/A	N/A	N/A	N/A
diuron (ISO)	1000	N/A	N/A	N/A	N/A
Carbendazim	N/A	2000	N/A	N/A	N/A
2-Methyl-4-isothiazolin-3-one	100	300	N/A	0.5	N/A
Zinc Pyrithione	221	100	N/A	0.14	0.14
Zinc Pyrithione	221	100	N/A	0.14	0.14

Section 12. Ecological information

Toxicity

Acute ICS0 1.85 mg/l Marine water Acute ICS0 98 lg/ll Fresh water Acute ICS0 1.10 ppm Fresh water Acute ICS0 1.10 ppm Fresh water Acute ICS0 1.10 ppm Iresh water Acute ICS0 1.10 ppm Iresh water Acute ICS0 1.10 ppm Iresh water Acute ICS0 1.25 ll mg/l Fresh water Acute ICS0 2.518 mg/l Fresh water Acute ICS0 7200 µg/l Fresh water Acute ICS0 7200 µg/l Fresh water Acute ICS0 0.0013 mg/l Fresh water Acute ICS0 0.005 mg/l Fresh water Acute ICS0 500 µg/l Fresh water Chronic ICC10 0.11 µg/l Fresh water Acute ICS0 500 µg/l Fresh water Acute ICS0 500 µg/l Fresh water Acute ICS0 77 µg/l Fresh water Acute ICS0 0.07 ppm Fresh wa	Product/ingredient name	Result	Species	Exposure
Octylphenoxypoly(ethoxy) ethanol Acute LC50 1.1 ppm Fresh water Acute EC50 210 µg/l Fresh water Acute LC50 1.518 mg/l Fresh water Acute LC50 2.518 mg/l Fresh water Acute EC50 2.0 ug/l Fresh water Acute EC50 0.0013 mg/l Fresh water Acute EC50 0.0013 mg/l Fresh water Acute EC50 2.26 µg/l Marine water Acute EC50 2.26 µg/l Marine water Acute EC50 2.26 µg/l Marine water Acute EC50 7.2 mg/l Fresh water Acute EC50 2.26 µg/l Fresh water Acute EC50 2.26 µg/l Fresh water Acute EC50 2.26 µg/l Fresh water Acute EC50 7.2 mg/l Fresh water Acute EC50 2.41 µg/l Marine water Acute LC50 380 µg/l Fresh water Acute LC50 380 µg/l Fresh water Chronic EC10 0.11 µg/l Fresh water Chronic NOEC 0.34 µg/l Marine water Chronic NOEC 0.34 µg/l Marine water Chronic NOEC 26.4 ppb Acute EC50 19.0562 mg/l Fresh water Acute EC50 20 µg/l Fresh water Acute EC50 19.0562 mg/l Fresh water Acute EC50 10.11 µg/l Fresh water Acute EC50 19.0562 mg/l Fresh wate	Zinc Oxide			
Acute LC50 10800 μg/l Marine water Acute LC50 2.518 mg/l Fresh water Acute LC50 2.518 mg/l Fresh water Acute LC50 7200 μg/l Fresh water Acute EC50 0.0013 mg/l Fresh water Acute EC50 0.0013 mg/l Fresh water Acute EC50 0.005 mg/l Fresh water Acute EC50 0.005 mg/l Fresh water Acute EC50 7.2 mg/l Fresh water Acute EC50 7.2 mg/l Fresh water Acute LC50 380 μg/l Fresh water Acute LC50 500 μg/l Fresh water Acute EC50 10.11 μg/l Fresh water Acute EC50 10.9552 mg/l Fresh water Acute EC50 77 μg/l Fresh water Acute LC50 10.11 μg/l Fresh water Acute LC50 10.12 μg/l Fresh water Acute LC50 10.13 μg/l Fresh water Acute LC50 10.13 μg/l Marine water Acute LC5		Acute LC50 98 μg/l Fresh water	· · · · · · · · · · · · · · · · · · ·	48 hours
ethanol Acute LC50 10800 µg/l Marine water Acute LC50 2.518 mg/l Fresh water Acute LC50 7200 µg/l Fresh water Acute EC50 0.0013 mg/l Fresh water Acute EC50 0.0013 mg/l Fresh water Acute EC50 0.005 mg/l Fresh water Acute EC50 7.2 mg/l Fresh water Acute LC50 7.2 mg/l Fresh water Acute LC50 380 µg/l Fresh water Acute LC50 380 µg/l Fresh water Acute LC50 500 µg/l Fresh water Chronic NOEC 0.34 µg/l Marine water Chronic NOEC 0.34 µg/l Marine water Acute EC50 19.0562 mg/l Fresh water Acute LC50 77 µg/l Fresh water Acute LC50 77 µg/l Fresh water Acute LC50 77 µg/l Fresh water Acute LC50 7 µg/l Fresh water Acute LC50 0.18 ppm Fresh water Acute LC50 0.18 ppm Fresh water Acute LC50 0.51 µg/l Marine water Acute EC50 0.51 µg/l Marine water Ac				
Acute LC50 2.518 mg/l Fresh water Acute EC50 7.200 µg/l Fresh water Acute EC50 0.0013 mg/l Fresh water Acute EC50 0.0013 mg/l Fresh water Acute EC50 0.005 mg/l Fresh water Acute EC50 0.005 mg/l Fresh water Acute EC50 7.2 mg/l Fresh water Acute EC50 7.2 mg/l Fresh water Acute LC50 380 µg/l Fresh water Acute LC50 500 µg/l Fresh water Chronic NOEC 0.34 µg/l Marine water Chronic NOEC 26.4 ppb Acute EC50 19.0562 mg/l Fresh water Acute LC50 77 µg/l Fresh water Acute LC50 0.01 µg/l Fresh water Acute LC50 71 µg/l Fresh water Acute LC50 71 µg/l Fresh water Acute LC50 0.01 µg/l F		Acute EC50 210 μg/l Fresh water	Algae - Selenastrum sp.	96 hours
Acute LC50 2.518 mg/l Fresh water Acute EC50 0.0013 mg/l Fresh water Acute EC50 0.0013 mg/l Fresh water Acute EC50 0.0013 mg/l Fresh water Acute EC50 0.005 mg/l Fresh water Acute EC50 0.005 mg/l Fresh water Acute EC50 7.2 mg/l Fresh water Acute EC50 7.2 mg/l Fresh water Acute LC50 380 µg/l Fresh water Acute LC50 380 µg/l Fresh water Acute LC50 500 µg/l Fresh water Acute LC50 500 µg/l Fresh water Acute EC50 19.0562 mg/l Fresh water Acute EC50 7 µg/l Fresh water Acute LC50 10 µg/l Fresh water Acute LC50 7 µg/l Fresh water Acute LC50 7 µg/l Fresh water Acute LC50 7 µg/l Fresh water Acute LC50 0.01 µg/l Fresh water Acute EC50 0.18 ppm Fresh water Acute EC50 0.51 µg/l Marine water Acute EC50 0.51 µg/l Marine water Acute EC50 38 µg/l Fresh water Acute EC50 38 µg/l Fresh water Acute EC50 0.51 µg/l Marine water Acute EC50 38 µg/l Fresh water Acute EC50 38 µg/l Fresh water Acute EC50 0.51 µg/l Marine water Acute EC50 38 µg/l Fresh wat		Acute LC50 10800 μg/l Marine water		48 hours
diuron (ISO) Acute EC50 0.0013 mg/l Fresh water Acute EC50 2.26 µg/l Marine water Acute EC50 2.26 µg/l Marine water Acute EC50 0.005 mg/l Fresh water Acute EC50 7.2 mg/l Fresh water Acute EC50 7.2 mg/l Fresh water Acute IC50 2.41 µg/l Marine water Acute LC50 380 µg/l Fresh water Acute LC50 380 µg/l Fresh water Acute LC50 500 µg/l Fresh water Chronic EC10 0.11 µg/l Fresh water Chronic NOEC 0.34 µg/l Marine water Chronic NOEC 0.34 µg/l Marine water Chronic NOEC 0.34 µg/l Marine water Chronic NOEC 0.34 µg/l Fresh water Acute EC50 19.0562 mg/l Fresh water Acute EC50 20 µg/l Fresh water Acute EC50 20 µg/l Fresh water Acute EC50 77 µg/l Fresh water Acute EC50 77 µg/l Fresh water Acute LC50 79 µg/l Fresh water Acute EC50 0.18 ppm Fresh water Acute EC50 0.51 µg/l Marine water Acute EC		Acute LC50 2.518 mg/l Fresh water		48 hours
Acute EC50 2.26 μg/l Marine water Acute EC50 0.005 mg/l Fresh water Acute EC50 7.2 mg/l Fresh water Acute IC50 2.41 μg/l Marine water Acute IC50 2.41 μg/l Marine water Acute IC50 2.41 μg/l Marine water Acute IC50 380 μg/l Fresh water Acute LC50 380 μg/l Fresh water Acute LC50 500 μg/l Fresh water Chronic EC10 0.11 μg/l Fresh water Chronic NOEC 0.34 μg/l Marine water Chronic NOEC 26.4 ppb Acute EC50 19.0562 mg/l Fresh water Acute LC50 77 μg/l Fresh water Acute LC50 77 μg/l Fresh water Acute LC50 77 μg/l Fresh water Acute LC50 7 μg/l Fresh water Acute LC50 0.18 μg/m Fresh water Acute LC50 0.07 μg/m Fresh water Acute LC50 0.07 μg/m Fresh water Acute LC50 0.07 μg/l Fresh wa		Acute LC50 7200 µg/l Fresh water	Fish - Oncorhynchus mykiss	96 hours
Acute EC50 0.005 mg/l Fresh water Acute EC50 7.2 mg/l Fresh water Acute EC50 7.2 mg/l Fresh water Acute IC50 2.41 µg/l Marine water Acute LC50 380 µg/l Fresh water Acute LC50 380 µg/l Fresh water Acute LC50 500 µg/l Fresh water Chronic EC10 0.11 µg/l Fresh water Chronic NOEC 0.34 µg/l Marine water Chronic NOEC 0.34 µg/l Marine water Chronic NOEC 0.34 µg/l Fresh water Acute EC50 19.0562 mg/l Fresh water Acute EC50 19.0562 mg/l Fresh water Acute LC50 77 µg/l Fresh water Acute LC50 77 µg/l Fresh water Acute LC50 7 µg/l Fresh water Chronic EC10 10 µg/l Fresh water Acute LC50 7 µg/l Fresh water Acute LC50 7 µg/l Fresh water Chronic EC10 10 µg/l Fresh water Acute EC50 0.51 µg/l Marine water Acute EC50 0.51 µg/l Ma	diuron (ISO)	Acute EC50 0.0013 mg/l Fresh water	Algae - Chlorella pyrenoidosa	96 hours
Acute EC50 0.005 mg/l Fresh water Acute IC50 7.2 mg/l Fresh water Acute IC50 7.2 mg/l Fresh water Acute IC50 2.41 μg/l Marine water Acute LC50 380 μg/l Fresh water Acute LC50 380 μg/l Fresh water Acute LC50 500 μg/l Fresh water Chronic EC10 0.11 μg/l Fresh water Chronic NOEC 0.34 μg/l Marine water Chronic NOEC 26.4 ppb Acute EC50 19.0562 mg/l Fresh water Acute LC50 77 μg/l Fresh water Chronic EC10 10 μg/l Fresh water Acute LC50 7 μg/l Fresh water Acute LC50 7 μg/l Fresh water Chronic EC10 10 μg/l Fresh water Acute LC50 7 μg/l Fresh water Acute LC50 19.0562 mg/l Fresh water Acute LC50 7 μg/l Fresh water Acute LC50 0.31 ppb Fresh water Acute LC50 0.31 ppb Fresh water Acute LC50 0.51 μg/l Marine water Acute EC50 0.51 μg/l Fresh water Acute EC50 0.51 μg/l Marine water Acute EC50 0.51 μ		Acute EC50 2.26 μg/l Marine water		72 hours
Acute LC50 2.41 μg/l Marine water Acute LC50 380 μg/l Fresh water Chronic EC10 0.11 μg/l Fresh water Chronic NOEC 0.34 μg/l Marine water Chronic NOEC 0.34 μg/l Marine water Chronic NOEC 26.4 ppb Acute EC50 19.0562 mg/l Fresh water Acute LC50 77 μg/l Fresh water Acute LC50 77 μg/l Fresh water Chronic EC10 10 μg/l Fresh water Acute LC50 7 μg/l Fresh water Chronic EC10 10 μg/l Fresh water Acute LC50 7 μg/l Fresh water Chronic NOEC 3.1 ppb Fresh water Chronic NOEC 3.1 ppb Fresh water Acute EC50 0.18 ppm Fresh water Acute EC50 0.51 μg/l Marine water Acute EC50 38 μg/l Fresh water Acute		Acute EC50 0.005 mg/l Fresh water		96 hours
Acute LC50 380 µg/l Fresh water Acute LC50 500 µg/l Fresh water Chronic EC10 0.11 µg/l Fresh water Chronic NOEC 0.34 µg/l Marine water Chronic NOEC 26.4 ppb Acute EC50 19.0562 mg/l Fresh water Acute LC50 77 µg/l Fresh water Acute LC50 77 µg/l Fresh water Chronic EC10 10 µg/l Fresh water Acute LC50 77 µg/l Fresh water Chronic EC10 10 µg/l Fresh water Acute LC50 7 µg/l Fresh water Chronic EC10 10 µg/l Fresh water Acute LC50 7 µg/l Fresh water Chronic EC10 10 µg/l Fresh water Chronic EC10 10 µg/l Fresh water Acute EC50 0.18 ppm Fresh water Acute LC50 0.07 ppm Fresh water Acute EC50 0.51 µg/l Marine water Acute EC50 0.51 µg/l Marine water Acute EC50 38 µg/l Fresh water Acute EC50 38 µg			Daphnia - Daphnia magna -	48 hours
Acute LC50 500 μg/l Fresh water Chronic EC10 0.11 μg/l Fresh water Chronic NOEC 0.34 μg/l Marine water Chronic NOEC 26.4 ppb Carbendazim Carbendazim Carbendazim Carbendazim Carbendazim Carbendazim Carbendazim Acute EC50 19.0562 mg/l Fresh water Acute LC50 7 μg/l Fresh water Acute LC50 77 μg/l Fresh water Chronic EC10 10 μg/l Fresh water Chronic NOEC 3.1 ppb Fresh water Chronic EC10 10 μg/l Fresh water Chronic NOEC 3.1 ppb Fresh water Chronic NOEC 3.1 ppb Fresh water Chronic NOEC 3.1 ppb Fresh water Acute EC50 0.18 ppm Fresh water Acute EC50 0.51 μg/l Marine water Acute EC50 38 μg/l Fresh water Acute EC50 38 μg/l Fresh water Crustaceans - Ilyocypris dentifera Acute EC50 38 μg/l Fresh water Crustaceans - Ilyocypris dentifera 48 hours Acute EC50 38 μg/l Fresh water Crustaceans - Ilyocypris dentifera 48 hours Acute EC50 38 μg/l Fresh water Crustaceans - Ilyocypris dentifera 48 hours Acute EC50 38 μg/l Fresh water Crustaceans - Ilyocypris dentifera 48 hours Acute EC50 38 μg/l Fresh water Crustaceans - Ilyocypris dentifera 48 hours Acute EC50 38 μg/l Fresh water Crustaceans - Ilyocypris dentifera 48 hours Acute EC50 38 μg/l Fresh water Crustaceans - Ilyocypris dentifera 48 hours Acute EC50 38 μg/l Fresh water Crustaceans - Ilyocypris dentifera 48 hours Acute EC50 38 μg/l Fresh water Crustaceans - Ilyocypris dentifera 48 hours Acute EC50 38 μg/l Fresh water Crustaceans - Ilyocypris 48 hours Acute EC50 38 μg/l Fresh water Crustaceans - Ilyocypris 48 hours Acute EC50 38 μg/l Fresh water Crustaceans - Ilyocypris 48 hours Acute EC50 38 μg/l Fresh water Crustaceans - Ilyocypris 48 hours Acute EC50 38 μg/l Fresh water Crustaceans - Ilyocypris 48 hours Acute EC50 38 μg/l Fresh water Crustaceans - Ilyocypris 48 hours Acute EC50 38 μg/l Fresh water Crustaceans - Ilyocypris Acute EC50 38 μg/l Fresh		Acute IC50 2.41 µg/l Marine water	1	72 hours
Chronic EC10 0.11 µg/l Fresh water Chronic NOEC 0.34 µg/l Marine water Chronic NOEC 26.4 ppb Acute EC50 19.0562 mg/l Fresh water Acute LC50 77 µg/l Fresh water Acute LC50 77 µg/l Fresh water Chronic EC10 10 µg/l Fresh water Acute LC50 7 µg/l Fresh water Chronic EC10 10 µg/l Fresh water 2-Methyl-4-isothiazolin-3-one Zinc Pyrithione Acute EC50 38 µg/l Fresh water Acute		Acute LC50 380 μg/l Fresh water		48 hours
Chronic EC10 0.11 µg/l Fresh water Chronic NOEC 0.34 µg/l Marine water Chronic NOEC 26.4 ppb Acute EC50 19.0562 mg/l Fresh water Acute EC50 20 µg/l Fresh water Acute LC50 77 µg/l Fresh water Acute LC50 77 µg/l Fresh water Chronic EC10 10 µg/l Fresh water Acute LC50 7 µg/l Fresh water Chronic EC10 10 µg/l Fresh water 2-Methyl-4-isothiazolin-3-one Zinc Pyrithione Chronic EC10 0.31 µg/l Fresh water Acute EC50 38 µg/l Fresh water A		Acute LC50 500 µg/l Fresh water	Fish - Morone saxatilis - Larvae	96 hours
Carbendazim Chronic NOEC 0.34 μg/l Marine water Chronic NOEC 26.4 ppb Acute EC50 19.0562 mg/l Fresh water Acute EC50 20 μg/l Fresh water Acute LC50 77 μg/l Fresh water Acute LC50 77 μg/l Fresh water Acute LC50 7 μg/l Fresh water Chronic EC10 10 μg/l Fresh water Chronic NOEC 3.1 ppb Fresh water Acute EC50 0.07 ppm Fresh water Acute EC50 0.18 ppm Fresh water Acute EC50 0.51 μg/l Marine water Acute EC50 38 μg/l Fresh water				96 hours
Carbendazim Chronic NOEC 26.4 ppb Acute EC50 19.0562 mg/l Fresh water Acute EC50 20 μg/l Fresh water Acute LC50 77 μg/l Fresh water Acute LC50 77 μg/l Fresh water Acute LC50 7 μg/l Fresh water Chronic EC10 10 μg/l Fresh water Chronic NOEC 3.1 ppb Fresh water Acute EC50 0.18 ppm Fresh water Acute EC50 0.51 μg/l Marine water Acute EC50 38 μg/l Fresh water Acute EC50 19.0562 mg/l Fresh water Acute EC50 20 μg/l Fresh water Acute EC50 20 μg/l Fresh water Acute EC50 7 μg/l Fresh water Acute EC50 0.18 ppm Fresh water Acute EC50 0.51 μg/l Marine water Acute EC50 38 μg/l Fresh water		Chronic NOEC 0.34 µg/l Marine water		72 hours
CarbendazimAcute EC50 19.0562 mg/l Fresh water Acute EC50 20 μg/l Fresh water Acute LC50 77 μg/l Fresh waterAlgae - Scenedesmus acutus var. acutus Daphnia - Daphnia magna Crustaceans - Gammarus pulex - Juvenile (Fledgling, Hatchling, Weanling)48 hoursAcute LC50 7 μg/l Fresh waterFish - Ictalurus punctatus - Yolk-sac fry Crustaceans - Gammarus pulex - Adult96 hoursChronic EC10 10 μg/l Fresh waterCrustaceans - Gammarus pulex - Adult21 days2-Methyl-4-isothiazolin-3-oneAcute EC50 0.18 ppm Fresh water Acute LC50 0.07 ppm Fresh water Acute EC50 0.51 μg/l Marine waterDaphnia - Daphnia magna Daphnia - Daphnia magna Fish - Oncorhynchus mykiss Algae - Thalassiosira pseudonana21 days Algae - Thalassiosira pseudonanaAcute EC50 38 μg/l Fresh waterAcute EC50 38 μg/l Fresh waterAcute EC50 38 μg/l Fresh waterAlgae - Thalassiosira pseudonana48 hours				
Acute LC50 77 μg/l Fresh water Crustaceans - Gammarus pulex - Juvenile (Fledgling, Hatchling, Weanling) Acute LC50 7 μg/l Fresh water Chronic EC10 10 μg/l Fresh water Chronic NOEC 3.1 ppb Fresh water Chronic NOEC 3.1 ppb Fresh water Acute EC50 0.18 ppm Fresh water Acute LC50 0.07 ppm Fresh water Acute EC50 0.51 μg/l Marine water Acute EC50 38 μg/l Fresh water	Carbendazim		Algae - Scenedesmus acutus	
Acute LC50 77 μg/l Fresh water Acute LC50 7 μg/l Fresh water Acute LC50 7 μg/l Fresh water Crustaceans - Gammarus pulex - Juvenile (Fledgling, Hatchling, Weanling) Fish - Ictalurus punctatus - Yolk-sac fry Chronic EC10 10 μg/l Fresh water Chronic NOEC 3.1 ppb Fresh water Chronic NOEC 3.1 ppb Fresh water Acute EC50 0.18 ppm Fresh water Acute LC50 0.07 ppm Fresh water Acute EC50 0.51 μg/l Marine water Acute EC50 38 μg/l Fresh water Crustaceans - Gammarus pulex - Juvenile (Fledgling, Hatchling, Weanling) Fish - Ictalurus punctatus - Yolk-sac fry Crustaceans - Gammarus pulex - Adult Daphnia - Daphnia magna - Daphnia - Daphnia magna - Algae - Thalassiosira - Poseudonana - Acute EC50 38 μg/l Fresh water - Adult - Chronic NOEC 3.1 ppb Fresh water - Adult - Daphnia - Daphnia magna - Algae - Thalassiosira - Poseudonana - Acute EC50 38 μg/l Fresh water - Adult - Chronic NOEC 3.1 ppb Fresh water - Adult - Daphnia - Daphnia magna - Fish - Oncorhynchus mykiss - Algae - Thalassiosira - Poseudonana		Acute EC50 20 µg/l Fresh water	Daphnia - <i>Daphnia magna</i>	48 hours
Acute LC50 7 μg/l Fresh water Chronic EC10 10 μg/l Fresh water Chronic NOEC 3.1 ppb Fresh water 2-Methyl-4-isothiazolin-3-one Zinc Pyrithione Acute EC50 0.18 μg/l Fresh water Acute EC50 0.51 μg/l Marine water Acute EC50 38 μg/l Fresh water Acute EC50 38 μg/l Fresh water Acute EC50 38 μg/l Fresh water Acute EC50 7 μg/l Fresh water Fish - Ictalurus punctatus - Yolk- sac fry Crustaceans - Gammarus pulex - Adult Daphnia - Daphnia magna Daphnia - Daphnia magna Fish - Oncorhynchus mykiss Algae - Thalassiosira pseudonana Crustaceans - Ilyocypris dentifera 48 hours			Crustaceans - Gammarus pulex - Juvenile (Fledgling, Hatchling,	48 hours
Chronic EC10 10 μg/l Fresh water Chronic NOEC 3.1 ppb Fresh water 2-Methyl-4-isothiazolin-3-one Zinc Pyrithione Chronic NOEC 3.1 ppb Fresh water Acute EC50 0.18 ppm Fresh water Acute EC50 0.07 ppm Fresh water Acute EC50 0.51 μg/l Marine water Acute EC50 38 μg/l Fresh water Crustaceans - Gammarus pulex - Adult Daphnia - Daphnia magna Fish - Oncorhynchus mykiss Algae - Thalassiosira pseudonana Crustaceans - Ilyocypris dentifera 48 hours		Acute LC50 7 μg/l Fresh water	Fish - Ictalurus punctatus - Yolk-	96 hours
2-Methyl-4-isothiazolin-3-one 2-Methyl-4-isothiazolin-3-one 2-Methyl-4-isothiazolin-3-one 2-Methyl-4-isothiazolin-3-one 2-Methyl-4-isothiazolin-3-one Acute EC50 0.18 ppm Fresh water Acute LC50 0.07 ppm Fresh water Acute EC50 0.51 μg/l Marine water Acute EC50 0.51 μg/l Marine water Acute EC50 38 μg/l Fresh water		Chronic EC10 10 µg/l Fresh water	Crustaceans - Gammarus pulex	21 days
2-Methyl-4-isothiazolin-3-one Acute EC50 0.18 ppm Fresh water Acute LC50 0.07 ppm Fresh water Acute EC50 0.51 μg/l Marine water Acute EC50 0.51 μg/l Marine water Acute EC50 38 μg/l Fresh water		Chronic NOEC 3.1 ppb Fresh water		21 davs
Acute LC50 0.07 ppm Fresh water Zinc Pyrithione Acute EC50 0.51 μg/l Marine water Acute EC50 38 μg/l Fresh water	2-Methyl-4-isothiazolin-3-one			
Zinc Pyrithione Acute EC50 0.51 μg/l Marine water Algae - <i>Thalassiosira</i> pseudonana Acute EC50 38 μg/l Fresh water Crustaceans - <i>Ilyocypris</i> dentifera	,	· · · · · · · - · · ·	1 !	
Acute EC50 38 µg/l Fresh water Crustaceans - Ilyocypris 48 hours dentifera	Zinc Pyrithione		Algae - Thalassiosira	
		Acute EC50 38 μg/l Fresh water	Crustaceans - <i>Ilyocypris</i>	48 hours
ı		Acute EC50 8.25 ppb Fresh water		48 hours

Date of issue/Date of revision : 4/25/2024 Date of previous issue : 4/18/2024 Version : 9.02 8/12

Section 12. Ecological information

	Acute LC50 2.68 ppb Fresh water	Fish - Pimephales promelas	96 hours
	Chronic EC10 0.36 µg/l Marine water	Algae - Thalassiosira	96 hours
		pseudonana	
	Chronic NOEC 2.7 ppb Fresh water	Daphnia - <i>Daphnia magna</i>	21 days
Zinc Pyrithione	Acute EC50 0.51 µg/l Marine water	Algae - Thalassiosira	96 hours
		pseudonana	
	Acute EC50 38 μg/l Fresh water	Crustaceans - <i>Ilyocypris</i>	48 hours
		dentifera	
	Acute EC50 8.25 ppb Fresh water	Daphnia - <i>Daphnia magna</i>	48 hours
	Acute LC50 2.68 ppb Fresh water	Fish - Pimephales promelas	96 hours
	Chronic EC10 0.36 µg/l Marine water	Algae - <i>Thalassiosira</i>	96 hours
		pseudonana	
	Chronic NOEC 2.7 ppb Fresh water	Daphnia - <i>Daphnia magna</i>	21 days

Persistence and degradability

Not available.

Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
Zinc Oxide	-	28960	High
diuron (ISO)	-	5.2	Low
Carbendazim	-	2.51	Low
Zinc Pyrithione	-	11	Low
Zinc Pyrithione	-	11	Low

Mobility in soil

Soil/water partition coefficient (Koc)

: 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

	UN	IMDG	IATA
UN number	UN3082	UN3082	UN3082
UN proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Zinc Pyrithione, Zinc Oxide)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Zinc Pyrithione, Zinc Oxide). Marine pollutant (Zinc Pyrithione, Zinc Oxide)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Zinc Pyrithione, Zinc Oxide)

Date of issue/Date of revision : 4/25/2024 Date of previous issue : 4/18/2024 Version : 9.02 9/12

Section 14. Transport information

Transport hazard class(es)	9	9	9
Packing group	III	III	III
Environmental hazards	Yes.	Yes.	Yes.

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.

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 : Not available.

to IMO instruments

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 inventory (CSCL): Not determined. Japan

Japan inventory (ISHL): Not determined.

New Zealand : Not determined. : Not determined. **Philippines** Republic of Korea : Not determined.

Date of issue/Date of revision : 4/25/2024 Date of previous issue : 4/18/2024 Version: 9.02 10/12

Section 15. Regulatory information

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 : 4/25/2024 Date of issue/Date of : 4/25/2024

revision

Date of previous issue : 4/18/2024 Version : 9.02

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

MARPOL = International Convention for the Prevention of Pollution From Ships,

1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)

N/A = Not available SGG = Segregation Group UN = United Nations

Procedure used to derive the classification

Classification	Justification
AQUATIC HAZARD (ACUTE) - Category 2 AQUATIC HAZARD (LONG-TERM) - Category 2	Calculation method Calculation method

References : Not available.

▼ Indicates information that has changed from previously issued version.

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.

Date of issue/Date of revision : 4/25/2024 Date of previous issue : 4/18/2024 Version : 9.02 11/12

Date of issue/Date of revision : 4/25/2024 Date of previous issue : 4/18/2024 Version : 9.02 12/12 SHW-A4-UN-GHS - AE