

Date of issue 3 July 2025  
Version 7

## Section 1. Product and company identification

Product name : SIGMA AQUACOVER 45 APMYELLOW312505  
Product code : 249290.20  
Other means of identification : Not available.  
Product type : Liquid.

### Relevant identified uses of the substance or mixture and uses advised against

Identified uses	
Coating. Paints. Painting-related materials.	
Uses advised against	Reason
Not applicable.	


### Supplier's details:

Supplier : PPG Industrial do Brasil – Tintas e Vernizes Ltda  
Via Anhanguera KM 106, Bairro Sao Judas Tadeu  
Sumare / SP, Brasil  
55 19 2103-6000 (Recepção e Portaria)

Email address: : fds@ppg.com

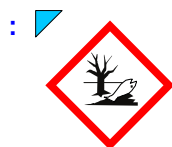
Emergency telephone number : 0800 707 1767 / 0800 707 7022 – Empresa Ambipar response (24hs)  
0800 014 8110 / (011)2661-8571 – CEATOX - Centro de Assistência Toxicológica  
(atendimento 24hs)

## Section 2. Hazards identification

Classification of the substance or mixture :  AQUATIC HAZARD (ACUTE) - Category 2  
AQUATIC HAZARD (LONG-TERM) - Category 2  
Target organs : Contains material which may cause damage to the following organs: blood, lungs, upper respiratory tract, central nervous system (CNS), eye, lens or cornea.

Percentage of the mixture consisting of ingredient(s) of unknown hazards to the aquatic environment: 4%

### GHS label elements Hazard pictograms



Signal word :  No signal word.

Section 2. Hazards identification

Hazard statements

: Toxic to aquatic life with long lasting effects.

Precautionary statements

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.

Other hazards which do not result in classification

: Contains isothiazolinones. May cause allergic reaction.

Section 3. Composition/information on ingredients

Substance/mixture

: Mixture

Other means of identification

: Not available.

Ingredient name	%	CAS number/other identifiers	Classification
Titanium dioxide	≥10 - ≤20	13463-67-7	CARCINOGENICITY - Category 2
(2-methoxymethylethoxy)propanol	≥1 - ≤3	34590-94-8	FLAMMABLE LIQUIDS - Category 4
isobutyric acid, monoester with 2,2,4-trimethylpentane-1,3-diol	≥1 - ≤3	25265-77-4	AQUATIC HAZARD (ACUTE) - Category 3
tetraamminezinc(2+) carbonate	≤0.26	38714-47-5	SKIN IRRITATION - Category 2 EYE IRRITATION - Category 2A SKIN SENSITIZATION - Category 1 AQUATIC HAZARD (ACUTE) - Category 1 AQUATIC HAZARD (LONG-TERM) - Category 1
ammonia	≤0.19	1336-21-6	ACUTE TOXICITY (oral) - Category 4 SKIN CORROSION - Category 1B SERIOUS EYE DAMAGE - Category 1 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3 AQUATIC HAZARD (ACUTE) - Category 1
4,5-dichloro-2-octyl-2H-isothiazol-3-one	<0.1	64359-81-5	ACUTE TOXICITY (oral) - Category 4 ACUTE TOXICITY (dermal) - Category 4 ACUTE TOXICITY (inhalation) - Category 2 SKIN CORROSION - Category 1 SERIOUS EYE DAMAGE - Category

## Section 3. Composition/information on ingredients

1,2-benzisothiazol-3(2H)-one	<0.1	2634-33-5	1 SKIN SENSITIZATION - Category 1A SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3 AQUATIC HAZARD (ACUTE) - Category 1 AQUATIC HAZARD (LONG-TERM) - Category 1  ACUTE TOXICITY (oral) - Category 4 ACUTE TOXICITY (inhalation) - Category 2 SKIN IRRITATION - Category 2 SERIOUS EYE DAMAGE - Category 1 SKIN SENSITIZATION - Category 1A AQUATIC HAZARD (ACUTE) - Category 1 AQUATIC HAZARD (LONG-TERM) - Category 1
3-iodo-2-propynyl butylcarbamate	≤0.067	55406-53-6	ACUTE TOXICITY (oral) - Category 4 ACUTE TOXICITY (dermal) - Category 5 ACUTE TOXICITY (inhalation) - Category 2 SERIOUS EYE DAMAGE - Category 1 SKIN SENSITIZATION - Category 1B SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 1 AQUATIC HAZARD (ACUTE) - Category 1 AQUATIC HAZARD (LONG-TERM) - Category 1
octamethylcyclotetrasiloxane	≤0.036	556-67-2	FLAMMABLE LIQUIDS - Category 3 ACUTE TOXICITY (dermal) - Category 5 TOXIC TO REPRODUCTION - Category 2 AQUATIC HAZARD (LONG-TERM) - Category 1
pyrithione zinc	<0.01	13463-41-7	ACUTE TOXICITY (oral) - Category 3 ACUTE TOXICITY (dermal) - Category 5 ACUTE TOXICITY (inhalation) - Category 2 SERIOUS EYE DAMAGE - Category 1 TOXIC TO REPRODUCTION -

## Section 3. Composition/information on ingredients

			Category 1B SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 1 AQUATIC HAZARD (ACUTE) - Category 1 AQUATIC HAZARD (LONG-TERM) - Category 1
--	--	--	--

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.

SUB codes represent substances without registered CAS Numbers.

## Section 4. First aid measures

### Description of necessary first aid measures

- Eye contact** : Remove contact lenses, irrigate copiously with clean, fresh water, holding the eyelids apart for at least 10 minutes and seek immediate medical advice.
- Inhalation** : Remove to fresh air. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel.
- Skin contact** : Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water or use recognized skin cleanser. Do NOT use solvents or thinners.
- Ingestion** : If swallowed, seek medical advice immediately and show this container or label. Keep person warm and at rest. Do NOT induce vomiting.

### 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.

### Potential acute health effects

- Eye contact** : No known significant effects or critical hazards.
- 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.

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.

## Section 5. Fire-fighting measures

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 oxides 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 mode.

## Section 6. Accidental release measures

### Personal precautions, protective equipment and emergency procedures

For non-emergency personnel	: <input checked="" type="checkbox"/> 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.

Section 7. Handling and storage

- Precautions for safe handling

- 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 between the following temperatures: 5 to 35°C (41 to 95°F). 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
<div> <div> Titanium dioxide </div> <div> (2-methoxymethylethoxy)propanol </div> <div> ammonia </div> </div>	<div> <b>ACGIH TLV (United States, 1/2024)</b>  TWA 8 hours: 2.5 mg/m³. Form: respirable fraction, finescale particles.  <b>ACGIH TLV (United States, 1/2024) [(2-Methoxymethylethoxy)propanol]</b>  Absorbed through skin.  TWA 8 hours: 100 ppm.  TWA 8 hours: 606 mg/m³.  STEL 15 minutes: 150 ppm.  STEL 15 minutes: 909 mg/m³.  <b>ACGIH TLV (United States, 1/2024) [dipropylene glycol methyl ether]</b>  TWA 8 hours: 50 ppm.  <b>Ministry of Labor and Employment (Brazil, 11/2001) [Ammonia]</b>  TWA 8 hours: 20 ppm.  TWA 8 hours: 14 mg/m³. </div>

- Appropriate engineering controls

- 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.

## Section 8. Exposure controls/personal protection

### Individual protection measures

- |                               |  |
|-------------------------------|--|
| <b>Hygiene measures</b>       | : 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.  |
| <b>Eye protection</b>         | : Safety glasses with side shields.  |
| <b>Skin protection</b>        |  |
| <b>Hand protection</b>        | : 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. |
| <b>Body protection</b>        | : 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.  |
| <b>Other skin protection</b>  | : 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.  |
| <b>Respiratory protection</b> | : Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. If workers are exposed to concentrations above the exposure limit, they must use appropriate, certified respirators. Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary.   |

## Section 9. Physical and chemical properties

### Appearance

- |   |                             |
|---|-----------------------------|
| <b>Physical state</b>                               | : Liquid.                   |
| <b>Color</b>  | : Various                   |
| <b>Odor</b>   | : Amine-like.               |
| <b>pH</b>   | : Not available.            |
| <b>Melting point</b>                                | : Not available.            |
| <b>Boiling point</b>                                | : >37.78°C (>100°F)         |
| <b>Flash point</b>                                  | : Closed cup: 120°C (248°F) |
| <b>Evaporation rate</b>                             | : Not available.            |
| <b>Flammability (solid, gas)</b>                    | : Not available.            |
| <b>Lower and upper explosive (flammable) limits</b> | : Not available.            |
| <b>Vapor pressure</b>                               | : Not available.            |
| <b>Vapor density</b>                                | : Not available.            |
| <b>Relative density</b>                             | : 1.25                      |

## Section 9. Physical and chemical properties

Solubility(ies)	:	<table><tr><th>Media</th><th>Result</th></tr><tr><td>cold water</td><td>Partially soluble</td></tr></table>	Media	Result	cold water	Partially soluble
Media	Result					
cold water	Partially soluble					
Partition coefficient: n-octanol/water	:	Not applicable.				
Auto-ignition temperature	:	207°C (404.6°F)				
Decomposition temperature	:	Not available.				
Viscosity	:	Dynamic (room temperature): Not available. Kinematic (room temperature): Not available. Kinematic (40°C (104°F)): >21 mm²/s (>21 cSt)				
Viscosity	:	60 - 100 s (ISO 6mm)				
<u>Particle characteristics</u>						
Median particle size	:	Not applicable.				

## 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	When exposed to high temperatures may produce hazardous decomposition products.
Incompatible materials	Keep away from the following materials to prevent strong exothermic reactions: oxidizing agents, strong alkalis, strong acids.
Hazardous decomposition products	Depending on conditions, decomposition products may include the following materials: carbon oxides metal oxide/oxides

## Section 11. Toxicological information

### Information on toxicological effects

This section contains information about toxicological effects and routes of exposure for the substances or mixtures that have these data or information available. There might be substances listed in section 3 of this SDS that will not have the information available.

Based on available data, the classification criteria are not met.

### Acute toxicity

Product/ingredient name	Result	Dose
Titanium dioxide	Rat - Oral - LD50 Rabbit - Dermal - LD50 Rat - Inhalation - LC50 Dusts and mists	>5000 mg/kg >5000 mg/kg >6.82 mg/l [4 hours]
isobutyric acid, monoester with 2,2,4-trimethylpentane-1,3-diol	Rat - Oral - LD50	6.5 g/kg
ammonia	Rabbit - Dermal - LD50	>15.2 g/kg
4,5-dichloro-2-octyl-2H-isothiazol-3-one	Rat - Oral - LD50 Rat - Oral - LD50	350 mg/kg 567 mg/kg



## Section 11. Toxicological information

1,2-benzisothiazol-3(2H)-one	Rabbit - Dermal - LD50 Rat - Inhalation - LC50 Dusts and mists Rat - Oral - LD50 Rat - Inhalation - LC50 Dusts and mists	3.9 g/kg 0.16 mg/l [4 hours] 450 mg/kg 0.21 mg/l [4 hours]
3-iodo-2-propynyl butylcarbamate	Rabbit - Dermal - LD50 Rat - Oral - LD50 Rat - Inhalation - LC50 Dusts and mists	>2 g/kg 1470 mg/kg 0.67 mg/l [4 hours]
octamethylcyclotetrasiloxane	Rat - Oral - LD50 Rat - Dermal - LD50 Rat - Inhalation - LC50 Vapor	>4800 mg/kg >2375 mg/kg 36 g/m³ [4 hours]
pyrithione zinc	Rat - Oral - LD50 Rabbit - Dermal - LD50 Rat - Inhalation - LC50 Dusts and mists	177 mg/kg >2 g/kg 0.14 mg/l [4 hours]

**Conclusion/Summary** : Based on available data, the classification criteria are not met.  
**Irritation/Corrosion**

Product/ingredient name	Species	Dose	Score
3-iodo-2-propynyl butylcarbamate pyrithione zinc	Rabbit - Eyes - Severe irritant Rabbit - Eyes - Cornea opacity	- Duration of treatment/exposure: 24 hours Observation period: 24 hours	- Irritation score: 4

**Conclusion/Summary**  
**Skin** : Based on available data, the classification criteria are not met.  
**Eyes** : Based on available data, the classification criteria are not met.  
**Respiratory** : Based on available data, the classification criteria are not met.

### Sensitization

Product/ingredient name	Species	Result
1,2-benzisothiazol-3(2H)-one	Guinea pig - skin OECD 406	Result: Sensitizing

**Conclusion/Summary**  
**Skin** : Based on available data, the classification criteria are not met.  
**Respiratory** : Based on available data, the classification criteria are not met.

### Mutagenicity

**Conclusion/Summary** : Based on available data, the classification criteria are not met.

### Carcinogenicity

**Conclusion/Summary** : Based on available data, the classification criteria are not met.

### Classification

Product/ingredient name	OSHA	IARC	NTP
titanium dioxide	-	2B	-

## Section 11. Toxicological information

### Carcinogen Classification code:

IARC: 1, 2A, 2B, 3, 4  
 NTP: Known to be a human carcinogen; Reasonably anticipated to be a human carcinogen  
 OSHA: +  
 Not listed/not regulated: -

### Reproductive toxicity

**Conclusion/Summary** : Based on available data, the classification criteria are not met.

### Specific target organ toxicity (single exposure)

Name	Category	Route of exposure	Target organs
ammonia	Category 3	-	Respiratory tract irritation
4,5-dichloro-2-octyl-2H-isothiazol-3-one	Category 3	-	Respiratory tract irritation

**Conclusion/Summary** : Based on available data, the classification criteria are not met.

### Specific target organ toxicity (repeated exposure)

Name	Category	Route of exposure	Target organs
3-iodo-2-propynyl butylcarbamate	Category 1	-	trachea
pyrithione zinc	Category 1	-	-

**Conclusion/Summary** : Based on available data, the classification criteria are not met.

**Target organs** : Contains material which may cause damage to the following organs: blood, lungs, upper respiratory tract, central nervous system (CNS), eye, lens or cornea.

### Aspiration hazard

Not available.

**Conclusion/Summary** : Based on available data, the classification criteria are not met.

**Information on the likely routes of exposure** : Not available.

### Potential acute health effects

**Eye contact** : No known significant effects or critical hazards.  
**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.

## Section 11. Toxicological information

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

**Conclusion/Summary** : There are no data available on the mixture itself. For many products, TiO<sub>2</sub> is utilized as a raw material in a liquid coating formulation. In this case, the TiO<sub>2</sub> particles are bound in a matrix with no meaningful potential for human exposure to unbound particles of TiO<sub>2</sub> when the product is applied with a brush or roller. Sanding the coating surface or mist from spray applications may be harmful depending on the duration and level of exposure and require the use of appropriate personal protective equipment and/or engineering controls (see Section 8). Exposure to component solvent vapor concentrations in excess of the stated occupational exposure limit may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on the kidneys, liver and central nervous system. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and, in extreme cases, loss of consciousness. Solvents may cause some of the above effects by absorption through the skin. There is some evidence that repeated exposure to organic solvent vapors in combination with constant loud noise can cause greater hearing loss than expected from exposure to noise alone. If splashed in the eyes, the liquid may cause irritation and reversible damage. Ingestion may cause nausea, diarrhea and vomiting. This takes into account, where known, delayed and immediate effects and also chronic effects of components from short-term and long-term exposure by oral, inhalation and dermal routes of exposure and eye contact.

### Short term exposure

**Potential immediate effects** : There are no data available on the mixture itself.

**Potential delayed effects** : There are no data available on the mixture itself.

### Long term exposure

**Potential immediate effects** : There are no data available on the mixture itself.

**Potential delayed effects** : There are no data available on the mixture itself.

### Potential chronic health effects

**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

Product/ingredient name	Oral (mg/kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapors) (mg/l)	Inhalation (dusts and mists) (mg/l)
Isobutyric acid, monoester with	6500	N/A	N/A	N/A	N/A
2,2,4-trimethylpentane-1,3-diol	350	N/A	N/A	N/A	N/A
ammonia	567	1100	N/A	N/A	0.16
4,5-dichloro-2-octyl-2H-isothiazol-3-one	450	N/A	N/A	N/A	0.21
1,2-benzisothiazol-3(2H)-one	1470	2500	N/A	0.5	0.67
3-iodo-2-propynyl butylcarbamate	N/A	2500	N/A	36	N/A
octamethylcyclotetrasiloxane					

## Section 11. Toxicological information

pyrithione zinc	221	2500	N/A	N/A	0.14
-----------------	-----	------	-----	-----	------

Other information : Not available.

## Section 12. Ecological information

### Toxicity

Product/ingredient name	Result	Species	Dose / Exposure
Titanium dioxide isobutyric acid, monoester with 2,2,4-trimethylpentane- 1,3-diol 4,5-dichloro-2-octyl-2H- isothiazol-3-one	Acute - LC50 - Fresh water	Daphnia - <i>Daphnia magna</i>	>100 mg/l [48 hours]
	Acute - LC50	Fish	33 mg/l [96 hours]
	Acute - EC50 - Marine water	Algae - Diatom - <i>Nitzschia pungens</i>	267.368 µg/l [96 hours]
	Chronic - NOEC - Marine water	Algae - Diatom - <i>Nitzschia pungens</i>	19.789 µg/l [96 hours]
	Acute - LC50 - Marine water	Crustaceans - Brine shrimp - <i>Artemia sp.</i>	0.318 mg/l [48 hours]
	Acute - LC50 - Fresh water	Fish	0.0027 mg/l [96 hours]
	Chronic - NOEC - Fresh water	Fish	0.00056 mg/l [97 days]
	Acute - EC50	Algae	0.11 mg/l [72 hours]
	Chronic - NOEC	Algae - Trout	0.0403 mg/l [72 hours]
	Acute - EC50	Daphnia	2.9 mg/l [48 hours]
1,2-benzisothiazol-3(2H)-one	Acute - LC50	Fish	2.15 mg/l [96 hours]
	Acute - LC50	Fish - Trout	0.067 mg/l [96 hours]
	Chronic - NOEC	Fish - Trout	0.049 mg/l [96 hours]
	Acute - EC50 - Fresh water	Daphnia - Water flea - <i>Daphnia magna</i>	0.186 mg/l [48 hours]
	Chronic - EC10	Algae - Green algae - <i>Raphidocelis subcapitata</i> - Exponential growth phase	0.025 mg/l [72 hours]
3-iodo-2-propynyl butylcarbamate	Acute - EC50	Algae - Green algae - <i>Raphidocelis subcapitata</i> - Exponential growth phase	0.039 mg/l [72 hours]
	Chronic - NOEC - Fresh water	Daphnia - Water flea - <i>Daphnia magna</i>	100 mg/l [21 days]
	Acute - LC50	Daphnia	0.0082 mg/l [48 hours]
	Chronic - NOEC	Daphnia	0.0027 mg/l [21 days]
	Acute - EC50 - Marine water	Algae - Diatom - <i>Nitzschia pungens</i>	5.513 µg/l [96 hours]
octamethylcyclotetrasiloxane	Chronic - NOEC - Marine water	Algae - Diatom - <i>Nitzschia pungens</i>	1.889 µg/l [96 hours]
pyrithione zinc			

Conclusion/Summary : Not available.

### Persistence/degradability

## Section 12. Ecological information

Product/ingredient name	Test	Result	Dose / Inoculum
isobutyric acid, monoester with 2,2,4-trimethylpentane-1,3-diol	OECD 301B	>76% [28 days] - Readily	
3-iodo-2-propynyl butylcarbamate	-	25% [28 days] - Inherent	
pyrithione zinc	-	39% [28 days]	

**Conclusion/Summary** : Not available.

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
isobutyric acid, monoester with 2,2,4-trimethylpentane-1,3-diol	-	-	Readily
1,2-benzisothiazol-3(2H)-one	-	-	Not readily
3-iodo-2-propynyl butylcarbamate	-	-	Inherent
pyrithione zinc	-	50%; <28 day(s)	Not readily

### Bioaccumulative potential

Product/ingredient name	LogP <sub>ow</sub>	BCF	Potential
(2-methoxymethylethoxy) propanol	0.004	-	Low
isobutyric acid, monoester with 2,2,4-trimethylpentane-1,3-diol	3.2	-	Low
1,2-benzisothiazol-3(2H)-one	0.7	-	Low
octamethylcyclotetrasiloxane	6.488	-	High
pyrithione zinc	0.9	0.9	Low

### Mobility in soil

**Soil/Water partition coefficient** : 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

## Section 13. Disposal considerations

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

	Brazil (ANTT)	IMDG	IATA
UN number	UN3082	UN3082	UN3082
UN proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (tetraamminezinc(2+) carbonate)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (tetraamminezinc(2+) carbonate)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (tetraamminezinc(2+) carbonate)
Transport hazard class(es)	9	9	9
Packing group	III	III	III
Environmental hazards	Yes.	Yes.	Yes.
Marine pollutant substances	Not applicable.	(tetraamminezinc(2+) carbonate)	Not applicable.

### Additional information

- Brazil** : 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.
- Risk number** : 90
- 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.
- 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 applicable.

## Section 15. Regulatory information

**References** : ABNT NBR 14725: 2023 (April 2025)

## Section 16. Other information

### History

Date of previous issue : 6/25/2025  
 Version : 7  
 Prepared by : EHS

**Key to abbreviations** : ADN = European Provisions concerning the International Carriage of Dangerous Goods by Inland Waterway  
 ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road  
 ATE = Acute Toxicity Estimate  
 BCF = Bioconcentration Factor  
 GHS = Globally Harmonized System of Classification and Labelling of Chemicals  
 IATA = International Air Transport Association  
 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)  
 RID = The Regulations concerning the International Carriage of Dangerous Goods by Rail  
 UN = United Nations

 Indicates information that has changed from previously issued version.

### Disclaimer

*The information contained in this data sheet is based on present scientific and technical knowledge. The purpose of this information is to draw attention to the health and safety aspects concerning the products supplied by PPG, and to recommend precautionary measures for the storage and handling of the products. No warranty or guarantee is given in respect of the properties of the products. No liability can be accepted for any failure to observe the precautionary measures described in this data sheet or for any misuse of the products.*