



**Date of issue**                      3 July 2025  
**Version 2**

## Section 1. Product and company identification

**Product name**                      : STEELGUARD 651 WHITE  
**Product code**                      : 000001114907  
**Other means of identification**   : 00359402; 00434337 ; 00467243  
**Product type**                      : Liquid.

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

Identified uses	
Professional painting, indoor brush/roller Professional painting, outdoor brush/roller Professional spray painting, near-industrial setting Professional non-spray painting, near-industrial setting	
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**   : CARCINOGENICITY - Category 2  
    TOXIC TO REPRODUCTION - Category 2  
    AQUATIC HAZARD (ACUTE) - Category 3  
    AQUATIC HAZARD (LONG-TERM) - Category 3


**Target organs**                               : Contains material which may cause damage to the following organs: kidneys, lungs, bladder, gastrointestinal tract, upper respiratory tract, eyes.


Percentage of the mixture consisting of ingredient(s) of unknown hazards to the aquatic environment: 19.1%

### GHS label elements

## Section 2. Hazards identification

Hazard pictograms : 

Signal word :  Warning

Hazard statements :  Suspected of causing cancer.  
Suspected of damaging fertility or the unborn child.  
Harmful to aquatic life with long lasting effects.

Precautionary statements

Prevention : Do not handle until all safety precautions have been read and understood. Wear protective gloves, protective clothing and eye or face protection. Avoid release to the environment.

Response : IF exposed or concerned: Get medical advice or attention.

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 : 00359402; 00434337 ; 00467243

Ingredient name	%	CAS number/other identifiers	Classification
 Polyphosphoric acids, ammonium salts	≥20 - ≤30	68333-79-9	ACUTE TOXICITY (oral) - Category 5
titanium dioxide	≥10 - ≤20	13463-67-7	CARCINOGENICITY - Category 2
melamine	≥5 - <10	108-78-1	ACUTE TOXICITY (oral) - Category 5 CARCINOGENICITY - Category 2 TOXIC TO REPRODUCTION - Category 2 SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2
pentaerythritol	≥5 - ≤10	115-77-5	Not classified as hazardous according to ABNT NBR 14725
isobutyric acid, monoester with 2,2,4-trimethylpentane-1,3-diol	≥1 - ≤3	25265-77-4	AQUATIC HAZARD (ACUTE) - Category 3
octhlinone (ISO)	<0.025	26530-20-1	ACUTE TOXICITY (oral) - Category 3 ACUTE TOXICITY (dermal) - Category 3 ACUTE TOXICITY (inhalation) -

### Section 3. Composition/information on ingredients

			Category 2 SKIN CORROSION - Category 1 SERIOUS EYE DAMAGE - Category 1 SKIN SENSITIZATION - Category 1A AQUATIC HAZARD (ACUTE) - Category 1 AQUATIC HAZARD (LONG-TERM) - Category 1
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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** : In case of inhalation of decomposition products in a fire, symptoms may be delayed.
- Specific treatments** : The exposed person may need to be kept under medical surveillance for 48 hours. 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.

#### 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 harmful 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  
nitrogen 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** : 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.

### 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). 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 ingest. Avoid breathing vapor or mist. 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 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. 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

Ingredient name	Exposure limits
Titanium dioxide	ACGIH TLV (United States, 1/2024) TWA 8 hours: 2.5 mg/m³. Form: respirable fraction, finescale particles.
pentaerythritol	ACGIH TLV (United States, 1/2024) TWA 8 hours: 10 mg/m³.

- 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. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye protection

: Safety glasses with side shields.

## Section 8. Exposure controls/personal protection

### Skin 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** : 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

**Physical state** : Liquid.  
**Color** : White.  
**Odor** : Not available.  
**pH** : Not available.  
**Melting point** : Not available.  
**Boiling point** : >37.78°C (>100°F)  
**Flash point** : Closed cup: Not applicable.  
**Evaporation rate** : Not available.  
**Flammability (solid, gas)** : Not available.  
**Lower and upper explosive (flammable) limits** : Not available.  
**Vapor pressure** : Not available.  
**Vapor density** : Not available.  
**Relative density** : 1.41

**Solubility(ies)** :

Media	Result
cold water	Partially soluble

**Partition coefficient: n-octanol/water** : Not applicable.

**Auto-ignition temperature** : Not available.

**Decomposition temperature** : Not available.

## Section 9. Physical and chemical properties

- Viscosity

: Dynamic (room temperature): Not available.  
 Kinematic (room temperature): Not available.  
 Kinematic (40°C (104°F)): >21 mm²/s (>21 cSt)
- Viscosity

: > 100 s (ISO 6mm)
- Particle characteristics

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 nitrogen 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.

- 
 Suspected of damaging fertility.


 Suspected of causing cancer.

### Acute toxicity

Product/ingredient name	Result	Dose
<div>            Polyphosphoric acids, ammonium salts         </div> <div>titanium dioxide</div>	Rat - Oral - LD50 Rat - Oral - LD50 Rabbit - Dermal - LD50 Rat - Inhalation - LC50 Dusts and mists	4.74 g/kg >5000 mg/kg >5000 mg/kg >6.82 mg/l [4 hours]
melamine	Rat - Oral - LD50 Rat - Inhalation - LC50 Dusts and mists	3161 mg/kg >5190 mg/m³ [4 hours]
pentaerythritol isobutyric acid, monoester with 2,2,4-trimethylpentane-1,3-diol	Rat - Oral - LD50 Rat - Oral - LD50	18500 mg/kg 6.5 g/kg
octhilinone (ISO)	Rabbit - Dermal - LD50 Rat - Oral - LD50 Rabbit - Dermal - LD50 Rat - Inhalation - LC50 Dusts and mists	>15.2 g/kg 125 mg/kg 311 mg/kg 0.27 mg/l [4 hours]

## Section 11. Toxicological information

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

### Irritation/Corrosion

#### 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
Octhilinone (ISO)	Mouse - skin OECD 429	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** : Suspected of causing cancer.

#### Classification

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

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)

Not available.

**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
melamine	Category 2	-	urinary system

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



## Section 11. Toxicological information

**Target organs** : Contains material which may cause damage to the following organs: kidneys, lungs, bladder, gastrointestinal tract, upper respiratory tract, eyes.

### 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** : Adverse symptoms may include the following:  
 reduced fetal weight  
 increase in fetal deaths  
 skeletal malformations  
**Skin contact** : Adverse symptoms may include the following:  
 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

**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). 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.

## Section 11. Toxicological information

### 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** : Suspected of causing cancer. Risk of cancer depends on duration and level of exposure.

**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

Product/ingredient name	Oral (mg/kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapors) (mg/l)	Inhalation (dusts and mists) (mg/l)
STEELGUARD 651 WHITE	11353.2	N/A	N/A	N/A	N/A
Polyphosphoric acids, ammonium salts	4740	N/A	N/A	N/A	N/A
melamine	3161	N/A	N/A	N/A	N/A
pentaerythritol	18500	N/A	N/A	N/A	N/A
isobutyric acid, monoester with 2,2,4-trimethylpentane-1,3-diol	6500	N/A	N/A	N/A	N/A
octhilinone (ISO)	125	311	N/A	N/A	0.27

**Other information** : Not available.

## Section 12. Ecological information

### Toxicity

Product/ingredient name	Result	Species	Dose / Exposure
Polyphosphoric acids, ammonium salts	Acute - EC50 - Fresh water	Daphnia - Water flea - <i>Daphnia magna</i> - Neonate	730.5 mg/l [48 hours]
titanium dioxide	Acute - LC50 - Fresh water	Daphnia - <i>Daphnia magna</i>	>100 mg/l [48 hours]
melamine	Acute - EC50	Daphnia	200 mg/l [48 hours]
isobutyric acid, monoester with 2,2,4-trimethylpentane-1,3-diol	Acute - LC50	Fish	33 mg/l [96 hours]

**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	

**Conclusion/Summary** : Not available.

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
isobutyric acid, monoester with 2,2,4-trimethylpentane-1,3-diol	-	-	Readily

### Bioaccumulative potential

Product/ingredient name	LogP <sub>ow</sub>	BCF	Potential
melamine	-1.22	3.8	Low
pentaerythritol	-1.7	1.26	Low
isobutyric acid, monoester with 2,2,4-trimethylpentane-1,3-diol	3.2	-	Low
octhilinone (ISO)	2.45	-	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 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	Not regulated.	Not regulated.	Not regulated.
UN proper shipping name	-	-	-
Transport hazard class(es)	-	-	-
Packing group	-	-	-
Environmental hazards	No.	No.	No.
Marine pollutant substances	Not applicable.	Not applicable.	Not applicable.

Additional information

Brazil : None identified.  
 Risk number : Not available.  
 IMDG : None identified.  
 IATA : None identified.

**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 : 4/28/2025  
 Version : 2  
 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

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## Section 16. Other information

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.*