

SAFETY DATA SHEET



Safety Data Sheet according to GB/T 16483-2008 and GB/T 17519-2013

Date of issue/Date of revision 17 January 2024

Version 2

Section 1. Chemical product and company identification

Product code : 000001187156
Product name : PPG AQUACOVER 45 NF WHITE
Product name : PPG AQUACOVER 45 NF WHITE
Other means of identification : 00443656; 00443660
Product type : Liquid.

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

Product use : Professional applications, Used by spraying.
Use of the substance/ mixture : Coating.
Uses advised against : Not applicable.

Supplier's details : PPG Coatings (Kunshan) Co., Ltd
53 Jinyang Road, Lujia Town,
215331 Kunshan City, Jiangsu Province, P.R. China
Tel: 86 512 57678859 Fax: 86 512 57678857

Emergency telephone number (with hours of operation) : 00 86 532 83889090

Section 2. Hazards identification

Classification of the substance or mixture according to GB 13690-2009 and GB 30000-2013

Emergency overview

Liquid.
Various
Odorless.
 May cause cancer.
Harmful to aquatic life.
Harmful to aquatic life with long lasting effects.
Contains isothiazolinones. May cause allergic reaction.

If exposed or concerned: Get medical advice or attention.

See Section 12 for environmental precautions.

Classification of the substance or mixture : CARCINOGENICITY - Category 1B
AQUATIC HAZARD (ACUTE) - Category 3
AQUATIC HAZARD (LONG-TERM) - Category 3
Percentage of the mixture consisting of ingredient(s) of unknown hazards to the aquatic environment: 29.7%

Section 2. Hazards identification

GHS label elements

Hazard pictograms



Signal word

: Danger

Hazard statements

: May cause cancer.
Harmful to aquatic life.
Harmful to aquatic life with long lasting effects.

Precautionary statements

Prevention

: Obtain special instructions before use. 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.

Suitable extinguishing media

: Use an extinguishing agent suitable for the surrounding fire.

Storage

: Store locked up.

Disposal

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

Physical and chemical hazards

: No known significant effects or critical hazards.

Health hazards

: May cause cancer.

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 effects

: Not available.

Potential delayed effects

: Not available.

Long term exposure

Potential immediate effects

: Not available.

Potential delayed effects

: Not available.

Environmental hazards

: Harmful to aquatic life. Harmful to aquatic life with long lasting effects.

Other hazards which do not result in classification

: None known.

Section 3. Composition/information on ingredients

Substance/mixture : Mixture
Other means of identification : 00443656; 00443660

CAS number/other identifiers

CAS number : Not applicable.

| Ingredient name | % | CAS number |
|---|----------|------------|
| 2-(2-butoxyethoxy)ethanol | 1 - <10 | 112-34-5 |
| Propane-1,2-diol, propoxylated (MW<2000) | 1 - <10 | 25322-69-4 |
| benzophenone | 0.1 - <1 | 119-61-9 |
| 3-iodo-2-propynyl butylcarbamate | <0.1 | 55406-53-6 |
| reaction mass of mixed (3,3,4,4,5,5,6,6,7,7, 8,8,8- tridecafluorooctyl) | <0.1 | SUB141402 |
| phosphates, ammonium salt | | |
| pyrithione zinc | <0.1 | 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.

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.
 In case of accidental eye contact, avoid direct exposure to the sun or other sources of UV light as severe irritation including burns may result. These reactions can be delayed – get medical attention if pain, irritation or blistering occurs after contact.
- 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.

Most important symptoms/effects, acute and delayed

Potential acute health effects

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

Section 4. First aid measures

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. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

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

Specific hazards arising from the chemical : 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
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".

Section 6. Accidental release measures

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. 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.

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 |
|---------------------------|---|
| 2-(2-butoxyethoxy)ethanol | ACGIH TLV (United States, 1/2023). TWA: 10 ppm 8 hours. Form: Inhalable fraction and vapor |

Section 8. Exposure controls/personal protection

- Recommended monitoring procedures** : Reference should be made to appropriate monitoring standards. Reference to national guidance documents for methods for the determination of hazardous substances will also be required.
- 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.
- 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.
- Gloves** : polyethylene
- 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** : Various
- Odor** : Odorless.
- Boiling point** : >37.78°C (>100°F)
- Flash point** : Closed cup: 120°C (248°F)

Section 9. Physical and chemical properties

Lower and upper explosive (flammable) limits : Greatest known range: Lower: 0.8% Upper: 9.4% (2-(2-butoxyethoxy)ethanol)

Relative density : 1.21

Solubility(ies) :

| Media | Result |
|------------|-------------------|
| cold water | Partially soluble |

Viscosity : Kinematic (40°C): >21 mm²/s

Viscosity : > 100 s (ISO 6mm)

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

Acute toxicity

| Product/ingredient name | Result | Species | Dose | Exposure |
|--|---------------------------------|---------|--------------|----------|
| 2-(2-butoxyethoxy)ethanol | LD50 Dermal | Rabbit | 2700 mg/kg | - |
| | LD50 Oral | Rat | 4500 mg/kg | - |
| Propane-1,2-diol, propoxylated (MW<2000) | LD50 Dermal | Rabbit | >10000 mg/kg | - |
| | LD50 Oral | Rat | 1000 mg/kg | - |
| benzophenone | LD50 Dermal | Rabbit | 3.535 g/kg | - |
| | LD50 Oral | Rat | >10 g/kg | - |
| 3-iodo-2-propynyl butylcarbamate | LC50 Inhalation Dusts and mists | Rat | 0.67 mg/l | 4 hours |
| | LD50 Dermal | Rabbit | >2 g/kg | - |
| reaction mass of mixed (3,3,4,4,5,5,6,6,7,7, 8,8,8-tridecafluorooctyl) phosphates, ammonium salt | LD50 Oral | Rat | 1470 mg/kg | - |
| | LC50 Inhalation Dusts and mists | Rat | 0.047 mg/l | 4 hours |
| pyrithione zinc | LC50 Inhalation Dusts and mists | Rat | 0.14 mg/l | 4 hours |
| | LD50 Dermal | Rabbit | >2 g/kg | - |

Section 11. Toxicological information

| | | | | |
|--|-----------|-----|-----------|---|
| | LD50 Oral | Rat | 177 mg/kg | - |
|--|-----------|-----|-----------|---|

Irritation/Corrosion

| Product/ingredient name | Result | Species | Score | Exposure | Observation |
|---|------------------------|---------|-------|----------|-------------|
| 3-iodo-2-propynyl butylcarbamate pyriothione zinc | Eyes - Severe irritant | Rabbit | - | - | - |
| | Eyes - Cornea opacity | Rabbit | 4 | 24 hours | 24 hours |

Sensitization

Not available.

Mutagenicity

Not available.

Carcinogenicity

Not available.

Reproductive toxicity

Not available.

Teratogenicity

Not available.

Specific target organ toxicity (single exposure)

Not available.

Specific target organ toxicity (repeated exposure)

| Name | Category | Route of exposure | Target organs |
|--|------------|-------------------|----------------|
| Benzophenone 3-iodo-2-propynyl butylcarbamate reaction mass of mixed (3,3,4,4,5,5,6,6,7,7, 8,8,8-tridecafluorooctyl) phosphates, ammonium salt pyriothione zinc | Category 2 | oral | kidneys, liver |
| | Category 1 | - | trachea |
| | Category 2 | - | liver |
| | Category 2 | - | - |

Aspiration hazard

Not available.

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.

Section 11. Toxicological information

Ingestion : No specific data.

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

Short term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Long term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Potential chronic health effects

General : No known significant effects or critical hazards.

Carcinogenicity : May cause cancer. Risk of cancer depends on duration and level of exposure.

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) |
|--|--------------|----------------|--------------------------|----------------------------|-------------------------------------|
| PPG AQUACOVER 45 NF WHITE | 39472.5 | 106766.8 | N/A | N/A | N/A |
| 2-(2-butoxyethoxy)ethanol | 4500 | 2700 | N/A | N/A | N/A |
| Propane-1,2-diol, propoxylated (MW<2000) | 1000 | N/A | N/A | N/A | N/A |
| benzophenone | 2500 | 3535 | N/A | N/A | N/A |
| 3-iodo-2-propynyl butylcarbamate | 1470 | 2500 | N/A | 0.5 | 0.67 |
| reaction mass of mixed (3,3,4,4,5,5,6,6,7,7, 8,8,8-tridecafluorooctyl) phosphates, ammonium salt | N/A | N/A | N/A | N/A | 0.047 |
| pyrithione zinc | 177 | 2500 | N/A | N/A | 0.14 |

Other information :

Contains isothiazolinones. May cause allergic reaction. Acrylate components of the mixture have irritating properties. Prolonged or repeated contact with skin or mucous membrane may result in irritation symptoms, such as redness, blistering, dermatitis etc. May cause allergic skin reactions with repeated exposure. The inhalation of airborne droplets or aerosols may cause irritation of the respiratory tract. Ingestion may cause nausea, weakness and central nervous system effects. In case of accidental skin contact, avoid direct exposure to the sun or other sources of UV light as severe irritation including burns may result. These reactions can be delayed – get medical attention if pain, irritation, rash or blistering occurs after contact.

Section 12. Ecological information

Toxicity

| Product/ingredient name | Result | Species | Exposure |
|--|--------------------------------------|----------------------------------|----------|
| Propane-1,2-diol, propoxylated (MW<2000) 3-iodo-2-propynyl butylcarbamate | Acute LC50 >100 mg/l | Fish | 96 hours |
| | Acute EC50 0.186 mg/l Fresh water | Daphnia - <i>Daphnia magna</i> | 48 hours |
| pyrithione zinc | Acute LC50 0.067 mg/l | Fish | 96 hours |
| | Chronic NOEC 0.049 mg/l | Fish | 96 hours |
| | Acute EC50 5.513 µg/l Marine water | Algae - <i>Nitzschia pungens</i> | 96 hours |
| | Acute LC50 0.0082 mg/l | Daphnia | 48 hours |
| | Chronic NOEC 1.889 µg/l Marine water | Algae - <i>Nitzschia pungens</i> | 96 hours |
| | Chronic NOEC 0.0027 mg/l | Daphnia | 21 days |

Persistence/degradability

| Product/ingredient name | Test | Result | Dose | Inoculum |
|---|------|---------------------------|------|----------|
| 3-iodo-2-propynyl butylcarbamate pyrithione zinc | - | 25 % - Inherent - 28 days | - | - |
| | - | 39 % - 28 days | - | - |

| Product/ingredient name | Aquatic half-life | Photolysis | Biodegradability |
|---|-------------------|------------------|------------------|
| 3-iodo-2-propynyl butylcarbamate pyrithione zinc | - | - | Inherent |
| | - | 50%; < 28 day(s) | Not readily |

Bioaccumulative potential

| Product/ingredient name | LogP _{ow} | BCF | Potential |
|--|--------------------|-------|-----------|
| (2-butoxyethoxy)ethanol | 1 | - | Low |
| Propane-1,2-diol, propoxylated (MW<2000) | -0.68 to 0.01 | - | Low |
| benzophenone | 3.18 | 12.02 | Low |
| pyrithione zinc | 0.9 | 0.9 | Low |

Mobility in soil

Soil/water partition coefficient (K_{oc}) : 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

Section 13. Disposal considerations

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

| | China | UN | IMDG | IATA |
|-----------------------------|-----------------|-----------------|-----------------|-----------------|
| UN number | Not regulated. | Not regulated. | Not regulated. | Not regulated. |
| UN proper shipping name | - | - | - | - |
| Transport hazard class(es) | - | - | - | - |
| Packing group | - | - | - | - |
| Environmental hazards | No. | No. | No. | No. |
| Marine pollutant substances | Not applicable. | Not applicable. | Not applicable. | Not applicable. |

Additional information

CN : None identified.

UN : None identified.

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

China inventory (IECSC) : All components are listed or exempted.

References :

- Production Safety Law of the People's Republic of China
- Code of Occupational Disease Prevention of the People's Republic of China
- Environmental Protection Law of the People's Republic of China
- Fire Control Law of the People's Republic of China
- Regulations on the Control over Safety of Dangerous Chemicals
- Occupational exposure limits for hazardous agents in the workplace chemical hazardous agents (GBZ2.1)
- General rule for classification and hazard communication of chemicals (GB13690)
- Safety data sheet for chemical products - Content and order of sections (GB/T16483)
- Guidance on the compilation of safety data sheet for chemical products (GB/T17519)
- General rule for preparation of precautionary label for chemicals (GB15258)

Section 15. Regulatory information

Safety rules for classification, precautionary labeling and precautionary statements of chemicals (GB30000.2-29)

Section 16. Other information

History

Date of issue/Date of revision : 17 January 2024

Date of previous issue : 3/17/2023

Version : 2

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.

Notice to reader

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.