SAFETY DATA SHEET



Date of issue/Date of revision 26 April 2022

Version 1.08

Section 1. Identification	
Product code	: 00310057
Product name	: PPG AQUACOVER 25 BUFF 3147
Product type	: Liquid.
Relevant identified uses o	f the substance or mixture and uses advised against
Product use	Coating. Professional applications, Used by spraying.
Supplier's details	: PPG Industries (Singapore) Pte. Ltd., No. 1 Tuas Basin Close, Singapore 638803. Tel +65 68653737
Emergency telephone number (with hours of operation)	: CHEMTREC +(65)-31581349 (CCN 17704)

Section 2. Hazards identification

Classification of the substance or mixture	: AQUATIC HAZARD (LONG-TERM) - Category 2
GHS label elements, includin	g precautionary statements
Hazard pictograms	
Signal word	: No signal word.
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.

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Section 3. Composition/information on ingredients

Substance/mixture : Mixture

CAS	number/other	identifiers

CAS number	: Not applicable.
EC number	: Mixture.

Ingredient name	%	CAS number
✓alc , not containing asbestiform fibres	5 - <10	14807-96-6
barium diboron tetraoxide	3 - <5	13701-59-2
trizinc bis(orthophosphate)	1 - <3	7779-90-0
2-(2-butoxyethoxy)ethanol	1 - <3	112-34-5
zinc oxide	1 - <3	1314-13-2

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.

Most important	symptoms/effects	<u>acute and delayed</u>

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.		

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

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Section 4. First aid measures

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

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 oxides phosphorus 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. Collect spillage.

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Section 6. Accidental release measures

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	L	
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 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

Section 8. Exposure controls/personal protection

Ingredient name		Exposure limits
	rm fibres	Workplace Safety and Health Act (Singapore, 2/2006).
barium diboron tetraoxide		PEL (long term): 2 mg/m ³ 8 hours. Workplace Safety and Health Act (Singapore, 2/2006).
2-(2-butoxyethoxy)ethanol		PEL (long term): 0.5 mg/m ³ , (Ba) 8 hours. ACGIH TLV (United States, 1/2021). TWA: 10 ppm 8 hours. Form: Inhalable
zinc oxide		fraction and vapor Workplace Safety and Health Act (Singapore, 2/2006). PEL (long term): 10 mg/m ³ 8 hours. Form: Dust PEL (short term): 10 mg/m ³ 15 minutes.
		Form: Fume PEL (long term): 5 mg/m ³ 8 hours. Form: Fume
Recommended monitoring procedures	atmosphere or biological monitoring of the ventilation or other control m protective equipment. Reference s	with exposure limits, personal, workplace g may be required to determine the effectiveness easures and/or the necessity to use respiratory hould be made to appropriate monitoring uidance documents for methods for the neces will also be required.
Appropriate engineering controls	: Good general ventilation should be contaminants.	sufficient to control worker exposure to airborne
Environmental exposure controls	they comply with the requirements	process equipment should be checked to ensure of environmental protection legislation. In some igineering modifications to the process uce emissions to acceptable levels.
ndividual protection measure	<u>es</u>	
Hygiene measures	eating, smoking and using the lava Appropriate techniques should be u	oroughly after handling chemical products, before tory and at the end of the working period. used to remove potentially contaminated clothing. e reusing. Ensure that eyewash stations and rkstation location.
Eye/face protection	: Safety glasses with side shields.	
Skin protection	· Chamical resistant impartieur	on complying with an environment standard should
Hand protection	be worn at all times when handling this is necessary. Considering the check during use that the gloves ar should be noted that the time to bre different for different glove manufac	ves complying with an approved standard should chemical products if a risk assessment indicates parameters specified by the glove manufacturer, e still retaining their protective properties. It eakthrough for any glove material may be cturers. In the case of mixtures, consisting of time of the gloves cannot be accurately
	estimated.	

Section 8. Exposure controls/personal protection

Gloves	: For prolonged or repeated handling, use the following type of gloves:
	Recommended: nitrile rubber, Chloroprene, Viton®, butyl rubber
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

<u>Appearance</u>	
Physical state	: Liquid.
Color	: Various
Odor	: Amine-like.
рН	Not available.
Boiling point	: >37.78°C (>100°F)
Flash point	: Closed cup: Not applicable.
Evaporation rate	: 0.003 (2-(2-butoxyethoxy)ethanol) compared with butyl acetate
Flammability (solid, gas)	: liquid
Vapor pressure	: Highest known value: 3.2 kPa (23.8 mm Hg) (at 20°C) (water). Weighted average: 2.83 kPa (21.23 mm Hg) (at 20°C)
Vapor density	 Highest known value: 7.5 (Air = 1) (isobutyric acid, monoester with 2,2,4-trimethylpentane-1,3-diol). Weighted average: 6.55 (Air = 1)
Relative density	: 1.37
Solubility	: Partially soluble in the following materials: cold water.
Auto-ignition temperature	: 225°C
Viscosity	: Kinematic (40°C (104°F)): >21 mm²/s (>21 cSt)
Viscosity	: 60 - 100 s (ISO 6mm)

Section 10. Stability and reactivity

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Possibility of haz reactions	zardous :	Under normal conditions of storage and use, hazardous reactions will not	: occur.
Chemical stability	у :	The product is stable.	
Reactivity	:	No specific test data related to reactivity available for this product or its in	gredients.

Section 10. Stability and reactivity

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 phosphorus oxides metal oxide/oxides

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient nam	ne Result	Species	Dose	Exposure
barium diboron tetraoxide			>3540 mg/m ³	4 hours
	LD50 Dermal	Rabbit	>2000 mg/kg	-
	LD50 Oral	Rat	0.85 g/kg	-
trizinc bis(orthophosphat	,		>5.7 mg/l	4 hours
2-(2-butoxyethoxy)ethan	LD50 Oral DI LD50 Dermal	Rat Rabbit	>5000 mg/kg 2700 mg/kg	-
	LD50 Oral	Rat	4500 mg/kg	-
zinc oxide	LC50 Inhalation Dusts and mists		>5700 mg/m ³	4 hours
	LD50 Dermal	Rat	>2000 mg/kg	-
	LD50 Oral	Rat	>5000 mg/kg	-
Conclusion/Summary	: There are no data available on the	mixture itself.		
Irritation/Corrosion				
Conclusion/Summary				
Skin	: There are no data available on the	mixture itself.		
Eyes	: There are no data available on the	mixture itself.		
Respiratory	: There are no data available on the	mixture itself.		
Sensitization				
Conclusion/Summary				
Skin	: There are no data available on the	mixture itself.		
Respiratory	: There are no data available on the	mixture itself.		
<u>Mutagenicity</u>				
Conclusion/Summary	: There are no data available on the	e mixture itself.		
Carcinogenicity				
Conclusion/Summary	: There are no data available on the	e mixture itself.		
Reproductive toxicity				
Conclusion/Summary	: There are no data available on the	e mixture itself.		
Teratogenicity				
Conclusion/Summary	: There are no data available on the	e mixture itself.		
Specific target organ tox	<u>icity (single exposure)</u>			

Section 11. Toxicological information

Name		Category	Route of exposure	Target organs
		Category 3	-	Respiratory tract irritation
Specific target organ toxici	ty (repeated exposure)			·
Not available.				
<mark>Aspiration hazard</mark> Not available.				
nformation on the likely outes of exposure	: Not available.			
otential acute health effect	<u>ts</u>			
Eye contact	: No known significant e	effects or critical haza	ards.	
Inhalation	: No known significant e	effects or critical haza	ards.	
Skin contact	: No known significant e	effects or critical haza	ards.	
Ingestion	: No known significant e	effects or critical haza	ards.	
ymptoms related to the ph	ysical, chemical and toxi	cological character	<u>istics</u>	
Eye contact	: No specific data.			
nhalation	: No specific data.			
Skin contact	: No specific data.			
ngestion	: No specific data.			
elayed and immediate effe	ects and also chronic effe	ects from short and	<u>long term expos</u>	ure
<u>Short term exposure</u>				
Potential immediate effects	: Not available.			
Potential delayed effects	: Not available.			
<u>ong term exposure</u>				
Potential immediate effects	: Not available.			
Potential delayed effects	: Not available.			
Potential chronic health eff				
General	: No known significant e	effects or critical haza	ards.	
Carcinogenicity	: No known significant e	effects or critical haza	ards.	
Mutagenicity	: No known significant e	effects or critical haza	ards.	
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Numerical measures of toxicity

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Section 11. Toxicological information

Acute toxicity estimates

Route	ATE value
	28333.33 mg/kg 43.73 mg/l

Other information

Sanding and grinding dusts may be harmful if inhaled. Contains isothiazolinones. May cause allergic reaction.

Section 12. Ecological information

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Product/ingredient name	Result	Species	Exposure
trizinc bis(orthophosphate)	Acute LC50 0.112 mg/l	Fish	96 hours
	Chronic NOEC 0.026 mg/l	Fish	30 days
zinc oxide	Acute EC50 0.17 mg/l	Algae	72 hours
	Acute EC50 0.481 mg/l Fresh water	Daphnia - Daphnia magna -	48 hours
		Neonate	
	Chronic NOEC 0.017 mg/l Fresh water	Algae	72 hours
Conclusion/Summary	: There are no data available on the m	nixture itself.	

Persistence/degradability

Not available.

Conclusion/Summary	: There are no data available on the mixture itself.
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Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
2-(2-butoxyethoxy)ethanol	1	-	low

Mobility in soil

Soil/water partition	: Not available.
coefficient (Koc)	

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 nonrecyclable 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

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Section 13. Disposal considerations

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	ΙΑΤΑ
UN number	UN3082	UN3082	UN3082
UN proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
	(trizinc bis(orthophosphate), zinc oxide)	(trizinc bis(orthophosphate), zinc oxide)	(trizinc bis(orthophosphate), zinc oxide)
Transport hazard class(es)	9	9	9
Packing group	III	III	III
Environmental hazards	Yes.	Yes.	Yes.
Marine pollutant substances	Not applicable.	(trizinc bis(orthophosphate), zinc oxide)	Not applicable.

Additional information

UN	:	This product is not regulated as a dangerous good when transported in sizes of \leq 5 L or \leq 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.		
ΙΑΤΑ	:	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 bul to IMO instrume		• • • • • • • • • • • • • • • • • • • •	

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Section 15. Regulatory information

Singapore - hazardous chemicals under government control

None.

International regulations Montreal Protocol Not listed.

Stockholm Convention on Persistent Organic Pollutants

Not listed.

Section 16. Other information

<u>History</u>	
Date of issue/Date of revision	: 26 April 2022
Date of previous issue	: 6/29/2021
Version	: 1.08
Prepared by	: EHS
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 = International Air Transport Association IBC = 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) 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.