

Date of issue 6/20/2024 (month/day/year)

Version 1.05

## Section 1. Chemical product and company identification

A. **Product name** : NOVAGUARD 4801 CATALYST  
**Product code** : 000001090258

**Other means of identification**

00346208; 00673779

B. **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** : Product is not intended, labelled or packaged for consumer use.

C. **Supplier's or Importer's  
information** : PPG SSC  
(680-090)  
19, Yeocheon-ro 217beon-gil, Nam-gu,  
Ulsan, Korea  
Tel: +82-52-210-8222

**Email Address** Korea.MSDS@PPG.COM

**Emergency telephone  
number:** : +82-52-210-8331

## Section 2. Hazards identification

A. **Hazard classification** : ORGANIC PEROXIDES - Type C  
CORROSIVE TO METALS - Category 1  
ACUTE TOXICITY (oral) - Category 4  
ACUTE TOXICITY (dermal) - Category 4  
ACUTE TOXICITY (inhalation) - Category 2  
SKIN CORROSION - Category 1  
SERIOUS EYE DAMAGE - Category 1  
SKIN SENSITIZATION - Category 1  
CARCINOGENICITY - Category 2  
SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2  
AQUATIC HAZARD (LONG-TERM) - Category 3

This product is classified in accordance with the Industrial Safety and Health Act and the Chemical Control Act.

B. **GHS label elements, including precautionary statements**

**Symbol** :



## Section 2. Hazards identification

**Signal word** : Danger

**Hazard statements** : H242 - Heating may cause a fire.  
H290 - May be corrosive to metals.  
H302 + H312 - Harmful if swallowed or in contact with skin.  
H314 - Causes severe skin burns and eye damage.  
H317 - May cause an allergic skin reaction.  
H330 - Fatal if inhaled.  
H351 - Suspected of causing cancer.  
H373 - May cause damage to organs through prolonged or repeated exposure.  
H412 - Harmful to aquatic life with long lasting effects.

### Precautionary statements

**Prevention** : P202 - Do not handle until all safety precautions have been read and understood.  
P280 - Wear protective gloves, protective clothing and eye or face protection.  
P284 - In case of inadequate ventilation wear respiratory protection.  
P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
P234 - Keep only in original packaging.  
P273 - Avoid release to the environment.  
P260 - Do not breathe vapor.  
P270 - Do not eat, drink or smoke when using this product.  
P264 - Wash thoroughly after handling.

**Response** : P390 - Absorb spillage to prevent material damage.  
P308 + P313 - IF exposed or concerned: Get medical advice or attention.  
P304 + P340, P310 - IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER or doctor.  
P301 + P310, P330, P331 - IF SWALLOWED: Immediately call a POISON CENTER or doctor. Rinse mouth. Do NOT induce vomiting.  
P303 + P361 + P353, P310 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. Immediately call a POISON CENTER or doctor.  
P363 - Wash contaminated clothing before reuse.  
P302 + P312, P352 - IF ON SKIN: Call a POISON CENTER or doctor if you feel unwell. Wash with plenty of water.  
P333 + P313 - If skin irritation or rash occurs: Get medical advice or attention.  
P305 + P351 + P338, P310 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor.

**Storage** : P403 - Store in a well-ventilated place.  
P420 - Store separately.

**Disposal** : P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.

**C. Other hazards which do not result in classification** : Temperature control may be required. Hazardous decomposition may occur. Prolonged or repeated contact may dry skin and cause irritation.

## Section 3. Composition/information on ingredients

### CAS number/other identifiers

CAS number : Not applicable.

Chemical name	Common name	Identifiers	%
ethyl acetoacetate	Ethyl acetoacetate	CAS: 141-97-9	20 - <30
$\alpha,\alpha$ -dimethylbenzyl hydroperoxide	CUMENE HYDROPEROXIDE	CAS: 80-15-9	10 -<20
2-butanone peroxide	METHYL ETHYL KETONE PEROXIDE	CAS: 1338-23-4	10 -<20
tert-butyl perbenzoate	TERT-BUTYL PERBENZOATE	CAS: 614-45-9	5 - <10
cumene	CUMENE	CAS: 98-82-8	1 - <5

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

## Section 4. First aid measures

- A. Eye contact** : Check for and remove any contact lenses. Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open. Seek immediate medical attention.
- B. 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.
- C. 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.
- D. Ingestion** : If swallowed, seek medical advice immediately and show this container or label. Keep person warm and at rest. Do NOT induce vomiting.
- E. 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

### A. Extinguishing media

**Suitable extinguishing media** : Use an extinguishing agent suitable for the surrounding fire.

**Unsuitable extinguishing media** : None known.

**B. Specific hazards arising from the chemical** : Runoff to sewer may create fire or explosion hazard. This material increases the risk of fire and may aid combustion. Heating may cause a fire. May re-ignite itself after fire is extinguished. Hazardous decomposition may occur. 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

**C. Special equipment for fire-fighting** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

**Fire-fighting procedures** : 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.

## Section 6. Accidental release measures

**A. Personal precautions, protective equipment and emergency procedures** : 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. Shut off all ignition sources. No flares, smoking or flames in hazard area. Do not breathe vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

**B. 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.

### C. Methods and materials for containment and cleaning up

**Small spill** : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Avoid contamination with reactive substances. Dilute with water and mop up if water-soluble. Do not absorb in sawdust or other combustible material. It may lead to a fire risk when it dries out. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Absorb spillage to prevent material damage. Dispose of via a licensed waste disposal contractor.

## Section 6. Accidental release measures

- Large spill** : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Absorb spillage to prevent material damage. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Avoid contamination with reactive substances. Do not absorb in sawdust or other combustible material. It may lead to a fire risk when it dries out. 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

- A. Precautions for safe handling** : Put on appropriate personal protective equipment (see Section 8). Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. 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 breathe vapor or mist. Do not ingest. Avoid release to the environment. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Keep away from clothing, incompatible materials and combustible materials. Temperature control may be required. Empty containers retain product residue and can be hazardous. Do not reuse container. Absorb spillage to prevent material damage.
- B. Conditions for safe storage, including any incompatibilities** : To avoid the risk of formation of shock-sensitive crystals or loss of stability, it is important to store the product within the recommended temperature range. Temperature control may be required. Store in accordance with local regulations. Store in a segregated and approved area. 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 at temperatures not exceeding 20 °C/68 °F. Store in a corrosion resistant container with a resistant inner liner. Store locked up. Eliminate all ignition sources. Separate from reducing agents and combustible materials. Keep away from metals. Keep away from rust, iron and copper. Keep container tightly closed and sealed until ready for use. Prevent product contamination. 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

- A. Occupational exposure limits**

## Section 8. Exposure controls/personal protection

Ingredient name	Exposure limits
2-butanone peroxide	<b>Ministry of Employment and Labor (Republic of Korea, 1/2020).</b> CEIL: 0.2 ppm
cumene	<b>Ministry of Employment and Labor (Republic of Korea, 1/2020). Absorbed through skin.</b> TWA: 50 ppm 8 hours.

**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.

**B. Appropriate engineering controls** : Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment. Use with adequate ventilation.

**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.

### C. Personal protective equipment

**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.

**Eye protection** : Chemical splash goggles and face shield.

**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** : 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.

**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. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

## Section 9. Physical and chemical properties

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

### A. Appearance

Physical state : Liquid.

Color : Clear.

B. Odor : Not available.

C. Odor threshold : Not available.

D. pH : Not applicable.

E. Melting/freezing point : Not available.

F. Boiling point/boiling range : >37.78°C (>100°F)

G. Flash point : Closed cup: Not applicable.

H. Evaporation rate : Not available.

I. Flammability (solid, gas) : Not available.

J. Lower and upper explosive (flammable) limits : Greatest known range: Lower: 1% Upper: 54% (ethyl acetoacetate)

K. Vapor pressure :

Ingredient name	Vapor Pressure at 20°C			Vapor pressure at 50°C		
	mm Hg	kPa	Method	mm Hg	kPa	Method
cumene	3.72032	0.5				

L. Solubility(ies) :

Media	Result
cold water	Not soluble

Solubility in water : Not available.

M. Vapor density : Not available.

N. Relative density : 1.05

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

P. Auto-ignition temperature :

Ingredient name	°C	°F	Method
tert-butyl perbenzoate	93	199.4	

Q. Decomposition temperature : Not available.

R. Viscosity : Kinematic (40°C (104°F)): >21 mm<sup>2</sup>/s (>21 cSt)

Flow time (ISO 2431) : Not available.

S. Molecular weight : Not applicable.

## Section 10. Stability and reactivity

- A. Chemical stability** : The product is stable.
- Possibility of hazardous reactions** : Hazardous reactions or instability may occur under certain conditions of storage or use.  
Conditions may include the following:  
temperature increase  
high temperature  
Reactions may include the following:  
hazardous decomposition  
risk of causing fire
- B. Conditions to avoid** : When exposed to high temperatures may produce hazardous decomposition products.
- C. Incompatible materials** : Keep away from the following materials to prevent strong exothermic reactions:  
oxidizing agents, strong alkalis, strong acids.
- D. Hazardous decomposition products** : Depending on conditions, decomposition products may include the following materials: carbon oxides

## Section 11. Toxicological information

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

### Potential acute health effects

- Inhalation** : Fatal if inhaled.
- Ingestion** : Harmful if swallowed.
- Skin contact** : Causes severe burns. Harmful in contact with skin. Defatting to the skin. May cause an allergic skin reaction.
- Eye contact** : Causes serious eye damage.

### Over-exposure signs/symptoms

- Inhalation** : No specific data.
- Ingestion** : Adverse symptoms may include the following:  
stomach pains
- Skin contact** : Adverse symptoms may include the following:  
pain or irritation  
redness  
dryness  
cracking  
blistering may occur
- Eye contact** : Adverse symptoms may include the following:  
pain  
watering  
redness

### **B. Health hazards**

#### Acute toxicity



## Section 11. Toxicological information

Product/ingredient name	Result	Species	Dose	Exposure
ethyl acetoacetate $\alpha,\alpha$ -dimethylbenzyl hydroperoxide	LD50 Oral	Rat	3980 mg/kg	-
	LC50 Inhalation Dusts and mists	Rat	1.37 mg/l	4 hours
	LD50 Dermal	Rat	1200 to 1520 mg/kg	-
2-butanone peroxide	LD50 Oral	Rat	382 mg/kg	-
	LC50 Inhalation Gas.	Rat	200 ppm	4 hours
	LC50 Inhalation Vapor	Rat	1440 mg/m <sup>3</sup>	4 hours
tert-butyl perbenzoate cumene	LD50 Oral	Rat	470 mg/kg	-
	LD50 Oral	Rat	1012 mg/kg	-
	LC50 Inhalation Vapor	Rat	39000 mg/m <sup>3</sup>	4 hours
	LD50 Dermal	Rabbit	12.3 g/kg	-
	LD50 Oral	Rat	2260 mg/kg	-

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

### Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
$\alpha,\alpha$ -dimethylbenzyl hydroperoxide	Skin - Visible necrosis	Rabbit	-	24 hours	24 hours

### 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.

### Mutagenicity

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

### Carcinogenicity

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

### Reproductive toxicity

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

### Teratogenicity

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

### Specific target organ toxicity (single exposure)

Name	Classification	Route of exposure	Target organs
$\alpha,\alpha$ -dimethylbenzyl hydroperoxide	Category 3	-	Respiratory tract irritation

## Section 11. Toxicological information

### Specific target organ toxicity (repeated exposure)

Name	Classification	Route of exposure	Target organs
$\alpha,\alpha$ -dimethylbenzyl hydroperoxide	Category 2	-	-

### Aspiration hazard

Not available.

### Potential chronic health effects

- General** : May cause damage to organs through prolonged or repeated exposure. Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis. Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.
- 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** : No known significant effects or critical hazards.

### Additional information

Prolonged or repeated contact may dry skin and cause irritation. Repeated exposure to high vapor concentrations may cause irritation of the respiratory system and permanent brain and nervous system damage. Inhalation of vapor/aerosol concentrations above the recommended exposure limits causes headaches, drowsiness and nausea and may lead to unconsciousness or death. Avoid contact with skin and clothing.

Chemical name	Identifiers	GHS Classification
ethyl acetoacetate	CAS: 141-97-9	FLAMMABLE LIQUIDS - Category 4 EYE IRRITATION - Category 2A
$\alpha,\alpha$ -dimethylbenzyl hydroperoxide	CAS: 80-15-9	FLAMMABLE LIQUIDS - Category 4 ORGANIC PEROXIDES - Type E CORROSIVE TO METALS - Category 1 ACUTE TOXICITY (oral) - Category 4 ACUTE TOXICITY (dermal) - Category 4 ACUTE TOXICITY (inhalation) - Category 2 SKIN CORROSION - Category 1B SERIOUS EYE DAMAGE - Category 1 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3 SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2
2-butanone peroxide	CAS: 1338-23-4	AQUATIC HAZARD (LONG-TERM) - Category 2 ORGANIC PEROXIDES - Type B CORROSIVE TO METALS - Category 1 ACUTE TOXICITY (oral) - Category 4 ACUTE TOXICITY (inhalation) - Category 3 SKIN CORROSION - Category 1 SERIOUS EYE DAMAGE - Category 1
tert-butyl perbenzoate	CAS: 614-45-9	FLAMMABLE LIQUIDS - Category 4 ORGANIC PEROXIDES - Type C ACUTE TOXICITY (oral) - Category 4 ACUTE TOXICITY (inhalation) - Category 4

## Section 11. Toxicological information

cumene	CAS: 98-82-8	SKIN IRRITATION - Category 2 SKIN SENSITIZATION - Category 1B AQUATIC HAZARD (ACUTE) - Category 1 FLAMMABLE LIQUIDS - Category 3 CARCINOGENICITY - Category 2
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## Section 12. Ecological information

### A. Ecotoxicity

Product/ingredient name	Result	Species	Exposure
α,α-dimethylbenzyl hydroperoxide	Acute EC50 3.1 mg/l	Algae	72 hours
	Acute LC50 23.4 mg/l Fresh water	Fish - <i>Danio rerio</i> - Embryo	96 hours
	Chronic NOEC 1 mg/l	Algae	72 hours

### B. Persistence and degradability

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
α,α-dimethylbenzyl hydroperoxide	-	-	Not readily

### C. Bioaccumulative potential

Product/ingredient name	LogP <sub>ow</sub>	BCF	Potential
ethyl acetoacetate	0.8	-	Low
α,α-dimethylbenzyl hydroperoxide	1.6	-	Low
2-butanone peroxide	<0.3	-	Low
tert-butyl perbenzoate	3	-	Low
cumene	3.55	35.48	Low

### D. Mobility in soil

Soil/water partition coefficient (K<sub>oc</sub>) : Not available.

E. Other adverse effects : No known significant effects or critical hazards.

## Section 13. Disposal considerations

A. 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.

## Section 13. Disposal considerations

**B. Disposal precautions** : This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

## Section 14. Transport information

	UN	IMDG	IATA
<b>A. UN number</b>	UN3103	UN3103	UN3103
<b>B. UN proper shipping name</b>	ORGANIC PEROXIDE TYPE C, LIQUID (Cumyl hydroperoxide, 2-Butanone, peroxide)	ORGANIC PEROXIDE TYPE C, LIQUID (Cumyl hydroperoxide, 2-Butanone, peroxide)	ORGANIC PEROXIDE TYPE C, LIQUID (Cumyl hydroperoxide, 2-Butanone, peroxide)
<b>C. Transport hazard class(es)</b>	5.2	5.2	5.2
<b>D. Packing group</b>	-	-	-
<b>Environmental hazards</b>	No.	No.	No.
<b>E. Marine pollutant substances</b>	Not applicable.	Not applicable.	Not applicable.

### Additional information

**UN** : None identified.

**IMDG** : None identified.

**IATA** : None identified.

### F. Special precaution which a user to be aware of or needs to comply with in connection with transport or transportation

**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

### A. Regulation according to ISHA

**ISHA article 117 (Harmful substances prohibited from manufacture)** : None of the components are listed.

**ISHA article 118 (Harmful substances requiring permission)** : None of the components are listed.

## Section 15. Regulatory information

**Article 2 of Youth Protection Act on Substances Hazardous to Youth** : It is not allowed to sell to persons under the age of 19.

### Exposure Limits of Chemical Substances and Physical Factors

The following components have an OEL:

2-butanone peroxide  
cumene

**ISHA Enforcement Regs Annex 19 (Exposure standards established for harmful factors)** : None of the components are listed.

**ISHA Enforcement Regs Annex 21 (Harmful factors subject to Work Environment Measurement)** : None of the components are listed.

**ISHA Enforcement Regs Annex 22 (Harmful Factors Subject to Special Health Check-up)** : None of the components are listed.

**Standard of Industrial Safety and Health Annex 12 (Hazardous substances subject to control)** : None of the components are listed.

### **B. Regulation according to Chemicals Control Act**

**Article 11 (TRI)** : None of the components are listed.

**Article 18 Prohibited (K-Reach Article 27)** : None of the components are listed.

**Article 19 Subject to authorization (K-Reach Article 25)** : None of the components are listed.

**Article 20 Restricted (K-Reach Article 27)** : None of the components are listed.

**Article 20 Toxic Chemicals (K-Reach Article 20)** : Not applicable

**Korea inventory** : All components are listed or exempted.

**Article 39 (Accident Precaution Chemicals)** : None of the components are listed.

### **C. Dangerous Materials Safety Management Act** : Not applicable.

### **D. Wastes regulation** : Dispose of contents and container in accordance with all local, regional, national and international regulations.

### **E. Regulation according to other foreign laws**

## Section 15. Regulatory information

**Safety, health and environmental regulations specific for the product** : No known specific national and/or regional regulations applicable to this product (including its ingredients).

## Section 16. Other information

- A. References** : Korean Ministry of Environment; Chemical Control Act  
Korean Ministry of Labor; Industrial Safety and Health Act  
NIER Notice  
Registry of Toxic Effects of Chemical Substances (RTECS)  
U.S. Environmental Protection Agency, AQUIRE (Aquatic toxicity Information Retrieval) ECOTOX Database System.
- B. First issue date** : 8/23/2022
- C. Date of issue/Date of revision** : **6/20/2024**
- D. Version** : **1.05**
- Prepared by** : EHS

**E. Other**

☑ 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.*