SAFETY DATA SHEET



Date of issue 12/16/2024 (month/day/year)

Version 2.01

Section 1. Chemical product and company identification

A. Product name : PSX 700 BASE RAL 9016

Product code : 000001161719

Other means of identification

00289191; 00384420

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

Email Address

: PPG SSC

(680-090)

19, Yeocheon-ro 217beon-gil, Nam-gu,

Ulsan, Korea

Tel: +82-52-210-8222 Korea.MSDS@PPG.COM

Emergency telephone

number:

: +82-52-210-8331

Section 2. Hazards identification

A. Hazard classification : FLAMMABLE LIQUIDS - Category 4

SKIN SENSITIZATION - Category 1 CARCINOGENICITY - 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 :





Signal word : Warning

Hazard statements: H227 - Combustible liquid.

H317 - May cause an allergic skin reaction. H351 - Suspected of causing cancer.

H412 - Harmful to aquatic life with long lasting effects.

Precautionary statements

Korea (GHS) Page: 1/12

Product name PSX 700 BASE RAL 9016

Section 2. Hazards identification

: P202 - Do not handle until all safety precautions have been read and understood. **Prevention**

P280 - Wear protective gloves, protective clothing and eye or face protection.

P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition

sources. No smoking.

P273 - Avoid release to the environment.

P261 - Avoid breathing vapor.

: P370 + P378 - In case of fire: Never use water to extinguish. Response

P308 + P313 - IF exposed or concerned: Get medical advice or attention.

P302 + P352 - IF ON SKIN: Wash with plenty of water.

P333 + P313 - If skin irritation or rash occurs: Get medical advice or attention. P362 + P364 - Take off contaminated clothing and wash it before reuse.

P321 - Specific treatment (see the label).

: F403 - Store in a well-ventilated place. **Storage**

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

national and international regulations.

C. Other hazards which do : None known.

not result in classification

Section 3. Composition/information on ingredients

CAS number/other identifiers

CAS number : Not applicable.

Chemical name	Common name	Identifiers	%
≰ ,4'-Isopropylidenedicyclohexanol,	cyclohexanol, 4,4'-(1-methylethylidene)	CAS: 30583-72-3	30 -
oligomeric reaction products with 1-chloro-2,3-epoxypropane	bis-, polymer with (chloromethyl)oxirane		<40
, , ,		EC: 500-070-7	
titanium dioxide	TITANIUM DIOXIDE	CAS: 13463-67-7	10 -<20
		EC: 236-675-5	
bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate	BIS(PENTAMETHYLPIPERIDYL) SEBACATE	CAS: 41556-26-7	1 - <5
		EC: 255-437-1	
nonylphenol ethoxylates	POLYOXYETHYLENE NONYLPHENYL ETHER PHOSPHATE	CAS: 68412-53-3	1 - <5
methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate	METHYL-(1,2,2,6,6-PENTAMETHYL- 4-PIPERDIYL) SEBACATE	CAS: 82919-37-7	0.1 - <1
	,	EC: 280-060-4	
methyl alcohol	METHYL ALCOHOL	CAS: 67-56-1	0.1 - <1
		EC: 200-659-6	

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.

Korea (GHS) Page: 2/12 Date of issue 12/16/2024 (month/day/year) Version 2.01

Product code 000001161719

Product name PSX 700 BASE RAL 9016

Section 4. First aid measures

A. 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.

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.

: If swallowed, seek medical advice immediately and show this container or label. **D.** Ingestion

Keep person warm and at rest. Do NOT induce vomiting.

: In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

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. Wash contaminated clothing thoroughly with water before removing it, or wear

aloves.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

A. Extinguishing media

E. Notes to physician

Suitable extinguishing

media

Unsuitable extinguishing media : Use dry chemical, CO₂, water spray (fog) or foam.

: Do not use water jet.

B. Specific hazards arising

from the chemical

: Combustible liquid. Runoff to sewer may create fire or explosion hazard. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. 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

halogenated compounds metal oxide/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. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

> Korea (GHS) Page: 3/12

Date of issue 12/16/2024 (month/day/year)

Product code 000001161719

Product name PSX 700 BASE RAL 9016

Version 2.01

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. Avoid breathing 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. 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. Use spark-proof tools and explosion-proof equipment. 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

- 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 ingest. Avoid breathing vapor or mist. 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. Empty containers retain product residue and can be hazardous. Do not reuse container.
- B. Conditions for safe storage, including any incompatibilities
- : Store between the following temperatures: 0 to 35°C (32 to 95°F). 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 locked up. Eliminate all ignition sources. Separate from oxidizing materials. 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.

Korea (GHS) Page: 4/12

Product code 000001161719 Date of issue 12/16/2024 (month/day/year) Version 2.01
Product name PSX 700 BASE RAL 9016

Section 8. Exposure controls/personal protection

A. Occupational exposure limits

Exposure limits	
ISHA Article 42 (Republic of Korea, 1/2020) TWA 8 hours: 10 mg/m³.	
ISHA Article 42 (Republic of Korea, 1/2020) Absorbed through skin. STEL 15 minutes: 250 ppm.	

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.

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 Hand protection

: Chemical splash goggles.

: 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.

Korea (GHS) Page: 5/12

Product name PSX 700 BASE RAL 9016

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 : Gray. B. Odor Aromatic. C. Odor threshold : Not available. D. pH Not applicable. E. Melting/freezing point : Not available. F. Boiling point/boiling : >37.78°C (>100°F)

range

G. Flash point : Closed cup: 70°C (158°F)

H. Evaporation rate : Not available. Flammability (solid, gas) : Not available. J. Lower and upper : Not available.

explosive (flammable)

limits

Not available. K. Vapor pressure

Media Result L. Solubility(ies)

> Not soluble cold water

Solubility in water : Not available. Vapor density Not available.

Relative density : 1.34

N. Partition coefficient: n-

octanol/water

: Not applicable.

Auto-ignition

temperature

: Not available.

Decomposition

: Not available.

temperature

: Dynamic (room temperature): Not available. **Viscosity**

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

Flow time (ISO 2431) : Not available. **Molecular weight** : Not applicable.

Section 10. Stability and reactivity

: The product is stable. A. Chemical stability

Possibility of hazardous

reactions

: Under normal conditions of storage and use, hazardous reactions will not occur.

B. Conditions to avoid : When exposed to high temperatures may produce hazardous decomposition products.

Korea (GHS)

Page: 6/12

Product name PSX 700 BASE RAL 9016

Section 10. Stability and reactivity

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 nitrogen oxides halogenated compounds metal oxide/oxides

Section 11. Toxicological information

A. Information on the likely : Not available.

routes of exposure

Potential acute health effects

Inhalation : No known significant effects or critical hazards.Ingestion : No known significant effects or critical hazards.

Skin contact: May cause an allergic skin reaction.

Eye contact : No known significant effects or critical hazards.

Over-exposure signs/symptoms

Inhalation: No specific data.Ingestion: No specific data.

Skin contact: Adverse symptoms may include the following:

irritation redness

Eye contact : No specific data.

B. Health hazards

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
titanium dioxide	LC50 Inhalation Dusts and mists	Rat	>6.82 mg/l	4 hours
	LD50 Dermal	Rabbit	>5000 mg/kg	-
	LD50 Oral	Rat	>5000 mg/kg	-
bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate	LD50 Oral	Rat	3.125 g/kg	-
methyl 1,2,2,6,6-pentamethyl- 4-piperidyl sebacate	LD50 Oral	Rat	3.125 g/kg	-
methyl alcohol	LC50 Inhalation Vapor	Rat	64000 ppm	4 hours
-	LD50 Dermal	Rabbit	15800 mg/kg	-
	LD50 Oral	Rat	5600 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.

Korea (GHS) Page: 7/12

Product name PSX 700 BASE RAL 9016

Section 11. Toxicological information

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
methyl alcoho	I	Category 1	-	-

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Not available.

Potential chronic health effects

General: 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

Trimethoxysilanes are capable of forming methanol if hydrolyzed or ingested. If swallowed, methanol may be harmful or fatal or cause blindness.

Chemical name	Identifiers	GHS Classification
√,4'-Isopropylidenedicyclohexanol, oligomeric reaction products with 1-chloro-2,3-epoxypropane ✓,4'-Isopropylidenedicyclohexanol, oligomeric reaction products with 1-chloro-2,3-epoxypropane ✓,5'	CAS: 30583-72-3	SKIN SENSITIZATION - Category 1B
titanium dioxide	EC: 500-070-7 CAS: 13463-67-7 EC: 236-675-5	AQUATIC HAZARD (LONG-TERM) - Category 3 CARCINOGENICITY - Category 2
bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate	CAS: 41556-26-7	SKIN SENSITIZATION - Category 1B
	EC: 255-437-1	TOXIC TO REPRODUCTION - Category 2 AQUATIC HAZARD (ACUTE) - Category 1

Korea (GHS) Page: 8/12

Product code 000001161719	Date of issue 12/16/2024 (month/day/year)	Version 2.01
Product name PSX 700 BASE RAL 9016		

Section 11. Toxicological information

nonylphenol ethoxylates	CAS: 68412-53-3	AQUATIC HAZARD (LONG-TERM) - Category 1 ACUTE TOXICITY (oral) - Category 4 ACUTE TOXICITY (dermal) - Category 4
methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate	CAS: 82919-37-7	SKIN SENSITIZATION - Category 1B
	EC: 280-060-4	TOXIC TO REPRODUCTION - Category 2 AQUATIC HAZARD (ACUTE) - Category 1 AQUATIC HAZARD (LONG-TERM) - Category 1
methyl alcohol	CAS: 67-56-1 EC: 200-659-6	FLAMMABLE LIQUIDS - Category 2 ACUTE TOXICITY (oral) - Category 3 ACUTE TOXICITY (dermal) - Category 3 ACUTE TOXICITY (inhalation) - Category 3 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) - Category 1 AQUATIC HAZARD (LONG-TERM) - Category 3

Section 12. Ecological information

A. Ecotoxicity

Product/ingredient name	Result	Species	Exposure
4,4'- Isopropylidenedicyclohexanol, oligomeric reaction products with 1-chloro- 2,3-epoxypropane		Fish	96 hours
titanium dioxide methyl alcohol	Acute LC50 >100 mg/l Fresh water Acute LC50 13 mg/l Fresh water	Daphnia - <i>Daphnia magna</i> Fish	48 hours 96 hours

B. Persistence and degradability

Not available.

C. Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
methyl alcohol	-0.77	-	Low

D. Mobility in soil

Soil/water partition coefficient (Koc)

: 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

Korea (GHS) Page: 9/12

Product name PSX 700 BASE RAL 9016

Section 13. Disposal considerations

should only be considered when recycling is not feasible.

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. Vapor from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

	UN	IMDG	IATA
A. UN number	Not regulated.	Not regulated.	Not regulated.
B. UN proper shipping name	-	-	-
C. Transport hazard class(es)	-	-	-
D. Packing group	-	-	-
Environmental hazards	No.	No.	No.
E. Marine pollutant substances	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 : Not applicable.

to IMO instruments

Section 15. Regulatory information

A. Regulation according to ISHA

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

Korea (GHS) Page: 10/12

Product name PSX 700 BASE RAL 9016

Section 15. Regulatory information

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

Article 2 of Youth Protection Act on Substances Hazardous

: It is not allowed to sell to persons under the age of 19.

to Youth

Exposure Limits of Chemical Substances and Physical Factors

The following components have an OEL:

Annex 19 (Exposure standards established for harmful factors)

ISHA Enforcement Regs : The following components are listed: methanol

ISHA Enforcement Regs Annex 11-5 (Harmful

factors subject to Work

: The following components are listed: titanium dioxide

Environment Measurement)

ISHA Enforcement Regs: None of the components are listed.

Annex 22 (Harmful Factors Subject to Special Health Check-

up)

Standard of Industrial **Safety and Health Annex 12 (Hazardous** substances subject to : The following components are listed: titanium dioxide

control)

B. Regulation according to Chemicals Control Act

: None of the components are listed. Article 11 (TRI) Article 18 Prohibited (K-: None of the components are listed.

Reach Article 27)

Article 19 Subject to authorization (K-Reach

Article 25)

: None of the components are listed.

Article 20 Restricted (K-

Reach Article 27)

Article 20 Toxic

Chemicals (K-Reach

Article 20)

Korea inventory

: The following components are listed: nonylphenol ethoxylates

: All components are listed or exempted.

Article 39 (Accident Precaution Chemicals) : The following components are listed: nonylphenol ethoxylates

C. Dangerous Materials : Class: Class 4 - Flammable Liquid **Safety Management Act**

: Not applicable

Item: 5. Class 3 petroleums - Water-insoluble liquid

Threshold: 2000 L Danger category: III

Signal word: Contact with sources of ignition prohibited

Korea (GHS) Page: 11/12

Product name PSX 700 BASE RAL 9016

Section 15. Regulatory information

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

E. Regulation according to other foreign laws

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 : 5/22/2024 C. Date of issue/Date of : 12/16/2024

revision

D. Version : 2.01
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.

Korea (GHS) Page: 12/12