SAFETY DATA SHEET



Date of issue 11/28/2023 (month/day/year)

Version 1

Section 1. Chemical product and company identification

Α.	Product name	1	PSX 700 BAS RAL 9005
	Product code	1	00475284

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 Korea.MSDS@PPG.COM
	Email Address		Kolea.modo@FFG.COm
	Emergency telephone number:	1	+82-52-210-8222

Section 2. Hazards identification

A. Hazard classification : 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

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Signal word	1	Warning
Hazard statements	-	H317 - May cause an allergic skin reaction. H351 - Suspected of causing cancer. H412 - Harmful to aquatic life with long lasting effects.
Precautionary statements	5	
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. P273 - Avoid release to the environment. P261 - Avoid breathing vapor.

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Section 2. Hazards identification

	Response	:	 P308 + P313 - IF exposed or concerned: Get medical advice or attention. P362 + P364 - Take off contaminated clothing and wash it before reuse. P302 + P352 - IF ON SKIN: Wash with plenty of water. P333 + P313 - If skin irritation or rash occurs: Get medical advice or attention.
	Storage	:	Not applicable.
	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	:	None known.

Section 3. Composition/information on ingredients

CAS number/other identifiers

CAS number : Not applicable.

Chemical name	Common name	Identifiers	%
4,4'-Isopropylidenedicyclohexanol, oligomeric reaction products with 1-chloro-2,3-epoxypropane	cyclohexanol, 4,4'-(1-methylethylidene) bis-, polymer with (chloromethyl)oxirane	CAS: 30583-72-3	20 - <30
carbon black bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate	CARBON BLACK BIS(PENTAMETHYLPIPERIDYL) SEBACATE	CAS: 1333-86-4 CAS: 41556-26-7	1 - <5 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

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

Α.	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.
в.	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.
Е.	Notes to physician	:	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.

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Section 4. First aid measures

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 gloves.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Α.	Extinguishing media		
	Suitable extinguishing media	;	Use an extinguishing agent suitable for the surrounding fire.
	Unsuitable extinguishing media	:	None known.
В.	Specific hazards arising from the chemical	:	In a fire or if heated, a pressure increase will occur and the container may burst. This material is harmful to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.
	Hazardous thermal decomposition products	:	Decomposition products may include the following materials: carbon oxides nitrogen oxides sulfur 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.

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. 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. 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.

Froduct hame F3X 700 BAS RAL 9005

Section 6. Accidental release measures

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

- 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. 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.
- 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 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

A. Occupational exposure limits

Ingredient name		Exposure limits
carbon black		Ministry of Employment and Labor (Republic of Korea, 1/2020). TWA: 3.5 mg/m ³ 8 hours. Form: inhalable fraction
Recommended monitoring procedures	: Reference should be made to appropri national guidance documents for meth substances will also be required.	iate monitoring standards. Reference to ods for the determination of hazardous
Appropriate engineering controls		s, gas, vapor or mist, use process enclosure eering controls to keep worker exposure to mmended or statutory limits.
Environmental exposure controls		

C. Personal protective equipment

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Section 8. Exposure controls/personal protection

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	: Safety glasses with side shields.
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.

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A. Appearance					
Physical state	:	Liquid.			
Color	:	Not available.			
B. Odor	:	Characteristic.			
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 app	licable.		
H. Evaporation rate	:	Not available.			
I. Flammability (solid, ga	as) :	Not available.			
J. Lower and upper explosive (flammable) limits		Not available.			
K. Vapor pressure	:		Vapo	r Pressu	re at 20°C
		Ingredient name	mm Hg	kPa	Method

carbon black

kPa

mm

Hg

Vapor pressure at 50°C

Method

Section 9. Physical and chemical properties

Е.	Solubility(ies) :	Media	Result
_		cold water	Not soluble
	Solubility in water :	Not available.	
м.	Vapor density :	Not available.	
N.	Relative density :	1.46	
N. О.	Partition coefficient: n- : octanol/water	Not applicable.	
Ρ.	Auto-ignition : temperature	Not available.	
Q.	Decomposition : temperature	Not available.	
R.	Viscosity :	Kinematic (40°C (104°F)): >21 mm²/s (>21 cSt)
ĸ.	Flow time (ISO 2431) :	Not available.	
S.	Molecular weight :	Not applicable.	

Section 10. Stability and reactivity

Α.	Chemical stability	1	The product is stable.
	Possibility of hazardous reactions	:	Under normal conditions of storage and use, hazardous reactions will not occur.
В.	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 nitrogen oxides sulfur oxides halogenated compounds metal oxide/oxides
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Section 11. Toxicological information

A. Information on the routes of exposure	· · · · · · · · · · · · · · · · · · ·		
Potential acute heal	th 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 sign	s/symptoms		
Inhalation	: No specific data.		
Ingestion	: No specific data.		
Skin contact	: Adverse symptoms may include the following: irritation redness		
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Section 11. Toxicological information

Eye contact

: No specific data.

B. Health hazards

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
carbon black bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate methyl 1,2,2,6,6-pentamethyl- 4-piperidyl sebacate	LD50 Oral LD50 Oral LD50 Oral	Rat Rat Rat	>10 g/kg 3.125 g/kg 3.125 g/kg	-

Conclusion/Summary : There

: 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		
<u>Conclusion/Summary</u>		
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.
<u>Carcinogenicity</u> Conclusion/Summary	: There are no data available on the mixture itself.
<u>Reproductive toxicity</u> 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) Not available.

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.

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Section 11. Toxicological information

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

Sanding and grinding dusts may be harmful if inhaled. 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
4,4'-Isopropylidenedicyclohexanol, oligomeric reaction products with 1-chloro-2,3-epoxypropane	CAS: 30583-72-3	SKIN SENSITIZATION - Category 1B
		AQUATIC HAZARD (LONG-TERM) - Category 3
carbon black	CAS: 1333-86-4	CARCINOGENICITY - Category 2
bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate	CAS: 41556-26-7	SKIN SENSITIZATION - Category 1B
		TOXIC TO REPRODUCTION - Category 2
		AQUATIC HAZARD (ACUTE) - Category 1 AQUATIC HAZARD (LONG-TERM) - Category 1
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methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate	CAS: 82919-37-7	SKIN SENSITIZATION - Category 1B
		TOXIC TO REPRODUCTION - Category 2
		AQUATIC HAZARD (ACUTE) - Category 1
		AQUATIC HAZARD (LONG-TERM) - Category 1

Section 12. Ecological information

A. Ecotoxicity

Product/ingredient name	Result	Species	Exposure
4,4'- Isopropylidenedicyclohexanol, oligomeric reaction products with 1-chloro- 2,3-epoxypropane	LC50 11.5 mg/l	Fish	96 hours

B. Persistence and degradability

Not available.

C. Bioaccumulative potential

Not available.

D. <u>Mobility in soil</u>

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

E. <u>Other adverse effects</u> : 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.

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	ΙΑΤΑ
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.
ΙΑΤΑ	: 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

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Section 15. Regulatory information

	-				
Α.	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.			
	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 carbon black	have an OEL:			
	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.			
В.	Regulation according to Chemicals Control Act				
	Article 11 (TRI)	: The following components are listed: Barium and its compounds			
	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.			
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Section 15. Regulatory information

C. <u>Dangerous Materials</u> : Not applicable. <u>Safety Management Act</u>

- D. <u>Wastes regulation</u> : Dispose of contents and container in accordance with all local, regional, national and international regulations.
- E. <u>Regulation according to other foreign laws</u>
 - Safety, health and environmental regulations specific for No known specific national and/or regional regulations applicable to this product (including its ingredients).

Section 16. Other information

Α.	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.
В.	Date of issue/Date of revision	: 11/28/2023
С.	Version	: 1
	Prepared by	: EHS
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D. 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.