SAFETY DATA SHEET

Date of issue/Date of revision 21 May 2021 Version3

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Section 1. Identification

Product code	: 00254234
Product name	: SIGMASHIELD 905 BASE
Other means of identification	: Not available.
Product type	: Liquid.
Relevant identified uses	s of the substance or mixture and uses advised against
Product use	: Coating. Professional applications, Used by spraying.
Uses advised against	: Product is not intended, labelled or packaged for consumer use.
Supplier's details	: PT PPG Coatings Indonesia JI. Rawagelam III No.1 13930 Jakarta Indonesia Tel +62 21 4605710 PMC.Safety@PPG.com
Emergency telephone number	: CHEMTREC 001-803-017-9114 (CCN 17704)

Section 2. Hazards identification

Classification of the	: ACUTE TOXICITY (inhalation) - Category 4
substance or mixture	SKIN CORROSION/IRRITATION - Category 2
	SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2A
	SKIN SENSITIZATION - Category 1
	AQUATIC HAZARD (LONG-TERM) - Category 2
	Fercentage of the mixture consisting of ingredient(s) of unknown acute inhalation toxicity: 70%
	Percentage of the mixture consisting of ingredient(s) of unknown hazards to the aquatic environment: 38.1%
GHS label elements, inclue	ding precautionary statements

Hazard pictograms			
Signal word	: Warning		
Hazard statements	 Causes skin irritation. May cause an allergic skin reaction. Causes serious eye irritation. Harmful if inhaled. Toxic to aquatic life with long lasting effects. 		
		Indonesia	[:] Page

Section 2. Hazards identification

Precautionary statements

Prevention	: Wear protective gloves. Wear eye or face protection. Use only outdoors or in a well- ventilated area. Avoid release to the environment. Avoid breathing vapor. Wash thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace.
Response	: Collect spillage. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor if you feel unwell. Take off contaminated clothing and wash it before reuse. IF ON SKIN: Wash with plenty of water. If skin irritation or rash occurs: Get medical advice or attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice or attention.
Storage	: Not applicable.
Disposal	: Dispose of contents and container in accordance with all local, regional, national and international regulations.

Other hazards which do not : Mone known. result in classification

Section 3. Composition/information on ingredients

Substance/mixture

: Mixture

CAS number/other identifiers

CAS number	: Not applicable.
	• N Alis etc

EC number : Mixture.

Ingredient name	%	CAS number
Epoxy resin (MW ≤ 700)	25- <50	25068-38-6
1,6-bis(2,3-epoxypropoxy)hexane	5- <10	16096-31-4
benzyl alcohol	5- <10	100-51-6
Talc , not containing asbestiform fibres	3- <5	14807-96-6

There are no 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.

SUB codes represent substances without registered CAS Numbers.

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

Section 4. First aid measures

Remove contact lenses, irrigate copiously with clean, fresh water, holding the eyelids apart for at least 10 minutes and seek immediate medical advice.
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.
Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water or use recognized skin cleanser. Do NOT use solvents or thinners.
If swallowed, seek medical advice immediately and show this container or label. Keep person warm and at rest. Do NOT induce vomiting.

Section 4. First aid measures

Most important symptoms/e	ffects, acute and delayed
Potential acute health effe	
Eye contact	: Causes serious eye irritation.
Inhalation	: Harmful if inhaled.
Skin contact	: Causes skin irritation. May cause an allergic skin reaction.
Ingestion	: No known significant effects or critical hazards.
<u>Over-exposure signs/symp</u>	toms
Eye contact	: Adverse symptoms may include the following: pain or irritation watering redness
Inhalation	: No specific data.
Skin contact	: Adverse symptoms may include the following: irritation redness
Ingestion	: No specific data.
Indication of immediate mediate	ical attention and special treatment needed, if necessary
Notes to physician	 Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
Specific treatments	: No specific treatment.
Protection of first-aiders	: No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media	
Suitable extinguishing media	: Use an extinguishing agent suitable for the surrounding fire.
Unsuitable extinguishing media	: None known.
Specific hazards arising from the chemical	: In a fire or if heated, a pressure increase will occur and the container may burst. This material is 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 halogenated compounds 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.
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Product name SIGMASHIELD 905 BASE

Section 5. Fire-fighting measures

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.
Methods and materials for co	ont	ainment 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

Section 7. Handling and storage

13 for waste disposal.

Precautions for safe handling

Protective measures	: 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. 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. 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.

Section 7. Handling and storage

Conditions for safe storage,	1	Storage temperature: 0 to 35°C (32 to 95°F). Store in accordance with local
including any		regulations. Store in original container protected from direct sunlight in a dry, cool
incompatibilities		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

Ingredient name	Exposure limits		
	Indonesia (Indon	of the Republic of esia, 4/2018). hours. Form: respirable	
Recommended monitoring procedures	If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to appropriate monitoring standards. Reference to national guidance documents for methods for the determination of hazardous substances will also be required.		
Appropriate engineering controls	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.		
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.		
ndividual protection measu			
Hygiene measures	Wash hands, forearms and face thoroughly after handling eating, smoking and using the lavatory and at the end of Appropriate techniques should be used to remove potent Contaminated work clothing should not be allowed out of contaminated clothing before reusing. Ensure that eyewa showers are close to the workstation location.	the working period. ially contaminated clothing. the workplace. Wash	
Eye/face protection	Chemical splash goggles.		
Skin protection			
Hand protection	Chemical-resistant, impervious gloves complying with an be worn at all times when handling chemical products if a this is necessary. Considering the parameters specified check during use that the gloves are still retaining their pr should be noted that the time to breakthrough for any glov different for different glove manufacturers. In the case of several substances, the protection time of the gloves can estimated.	risk assessment indicates by the glove manufacturer, rotective properties. It ve material may be mixtures, consisting of	

Section 8. Exposure controls/personal protection

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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.
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	: Aromatic.	
Odor threshold	: Not available.	
рН	: Not applicable.	
Melting point	: Not available.	
Boiling point	: >37.78°C (>100°F)	
Flash point	: Closed cup: 120°C (248°F)	
Evaporation rate	: Not available.	
Flammability/Combustible properties (solid, gas)	: Not available.	
Lower and upper explosive (flammable) limits	: Greatest known range: Lower: 1.3% Upper: 13% (benzyl alcohol)	
Vapor pressure	: Not available.	
Vapor density	: Not available.	
Relative density	: 1.4	
Solubility	: Insoluble in the following materials: cold water.	
Partition coefficient: n- octanol/water	: Not applicable.	
Auto-ignition temperature	: 415°C (779°F)	
Decomposition temperature	: Not available.	
Viscosity	: Kinematic (40°C): >21 mm²/s	
Viscosity	: 60 - 100 s (ISO 6mm)	

Section 10. Stability and reactivity

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Reactivity	: No specific test data related to reactivity available for this product or its ingredients.
Chemical stability	: The product is stable.
Possibility of hazardous reactions	: Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid	: When exposed to high temperatures may produce hazardous decomposition products.
Incompatible materials	: Keep away from the following materials to prevent strong exothermic reactions: oxidizing agents, strong alkalis, strong acids.
Hazardous decomposition products	: Depending on conditions, decomposition products may include the following materials: carbon oxides halogenated compounds metal oxide/oxides

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Epoxy resin (MW ≤ 700)	LD50 Dermal LD50 Oral	Rabbit Rat	>2 g/kg >2 g/kg	-
benzyl alcohol	LC50 Inhalation Dusts and mists LD50 Dermal LD50 Oral	Rat Rabbit Rat	>4178 mg/m ³ 2000 mg/kg 1.23 g/kg	4 hours - -

Conclusion/Summary

 There are no c	lata availahle	e on the mixture itself.

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
Epoxy resin (MW ≤ 700)	Skin - Mild irritant	Rabbit	-	-	-
	Eyes - Mild irritant	Rabbit	-	-	-

Conclusion/Summary

Skin : There are no data available on the mixture itse	elf.
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Eyes : There

There are no data available on the mixture itself.There are no data available on the mixture itself.

Respiratory : There are no data available

Sensitization

Product/ingredient name	Route of exposure	Species	Result	
Epoxy resin (MW ≤ 700)	skin	Mouse	Sensitizing	
Conclusion/Summary				
Skin	: There are no d	ata available on the mixture i	tself.	
Respiratory	: There are no d	ata available on the mixture i	tself.	
Mutagenicity				
Conclusion/Summary Carcinogenicity	: There are no d	ata available on the mixture i	tself.	

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

Section 11. Toxicological information

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		Route of exposure	Target organs
	Category 3	-	Respiratory tract irritation

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Not available.

Information on the likely : Not available. routes of exposure

Potential acute health effects

Eye contact	: Causes serious eye irritation.
Inhalation	: Harmful if inhaled.
Skin contact	: Causes skin irritation. May cause an allergic skin reaction.
Ingestion	: No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact	: Adverse symptoms may include the following: pain or irritation watering redness
Inhalation	: No specific data.
Skin contact	: Adverse symptoms may include the following: irritation redness
Ingestion	: No specific data.

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

Short term exposure	
Potential immediate effects	: There are no data available on the mixture itself.
Potential delayed effects Long term exposure	: There are no data available on the mixture itself.
Potential immediate effects	: There are no data available on the mixture itself.
Potential delayed effects Potential chronic health eff	: There are no data available on the mixture itself.

Section 11. Toxicological information

General	: Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.
Carcinogenicity	: No known significant effects or critical hazards.
Mutagenicity	: No known significant effects or critical hazards.
Reproductive toxicity	: No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

Route	ATE value
Øral	11031.34 mg/kg
Dermal	16690.97 mg/kg
Inhalation (dusts and mists)	4.96 mg/l

Other information

Sanding and grinding dusts may be harmful if inhaled. 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.

Section 12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
	Acute LC50 1.8 mg/l	Daphnia	48 hours
	Chronic NOEC 0.3 mg/l	Daphnia	21 days

Persistence/degradability

Product/ingredient name	Test	Result		Dose	Inoculum
Epoxy resin (MW ≤ 700)	OECD 301F	5 % - 28 days		-	-
Product/ingredient name	Aquatic half-life		Photolysis	5	Biodegradability
Epoxy resin (MW ≤ 700) benzyl alcohol	-		-		Not readily Readily

Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
Epoxy resin (MW ≤ 700)	3	31	low
1,6-bis(2,3-epoxypropoxy)	0.822	-	low
hexane			
benzyl alcohol	0.87	-	low

Mobility in soil

Soil/water partition coefficient (K_{oc})

: Not available.

Other adverse effects

: No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods

: The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and 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 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		
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.
	(Epoxy resin (MW \leq 700))	(Epoxy resin (MW \leq 700))	(Epoxy resin (MW ≤ 700))
Transport hazard class(es)	9	9	9
Packing group	III	III	III
Environmental hazards	Yes.	Yes.	Yes.
Marine pollutant substances	Not applicable.	(Epoxy resin (MW ≤ 700))	Not applicable.

Additional information

UN	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.
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 precaut	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 bu	Ik according : Not applicable.

to IMO instruments

Section 15. Regulatory information

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

Classification



Law No. 74/2001 - Banned

None of the components are listed.

Law No. 74/2001 - Restricted

None of the components are listed.

Law No. 74/2001 - : Not determined Chemicals that may be used

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	: 21 May 2021
Date of previous issue	: 3/25/2018
Version	: 3
Prepared by	: EHS
Key to abbreviations	 ADN = European Provisions concerning the International Carriage of Dangerous Goods by Inland Waterway ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road ATE = Acute Toxicity Estimate BCF = Bioconcentration Factor GHS = Globally Harmonized System of Classification and Labelling of Chemicals IATA = International Air Transport Association IMDG = International Maritime Dangerous Goods LogPow = logarithm of the octanol/water partition coefficient MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution) RID = The Regulations concerning the International Carriage of Dangerous Goods by Rail UN = United Nations

Indicates information that has changed from previously issued version.

Notice to reader

Section 16. Other information

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.