SAFETY DATA SHEET



Date of issue/Date of revision

6 January 2020

Version6.02

Section 1. Identification

Product code : 00254360

Product name : SIGMASHIELD 220 BASE

Other means of identification

: Not available.

Product type : Liquid.

Relevant identified uses of the substance or mixture and uses advised against

Product use : Coating. Paint. Painting-related materials.

Supplier's details : PT PPG Coatings Indonesia

Jl. 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 substance or mixture

: FLAMMABLE LIQUIDS - Category 3

ACUTE TOXICITY (inhalation) - Category 4 SKIN CORROSION/IRRITATION - Category 2

SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 1

SKIN SENSITIZATION - Category 1

SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract

irritation) - Category 3

AQUATIC HAZARD (LONG-TERM) - Category 3

Percentage of the mixture consisting of ingredient(s) of unknown acute toxicity:

35.9% (Oral), 56.9% (Dermal), 77.2% (Inhalation)

Percentage of the mixture consisting of ingredient(s) of unknown hazards to the

aquatic environment: 63.4%

GHS label elements, including precautionary statements

Hazard pictograms :







Signal word : Danger

Indonesia Page: 1/14

Date of issue 6 January 2020 Version 6.02

Product name SIGMASHIELD 220 BASE

Section 2. Hazards identification

Hazard statements

Product code 00254360

: Flammable liquid and vapor.

Harmful if inhaled.

Causes serious eye damage.

Causes skin irritation.

May cause an allergic skin reaction. May cause respiratory irritation.

Harmful to aquatic life with long lasting effects.

Precautionary statements

Prevention

: Wear protective gloves. Wear eye or face protection. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use explosion-proof electrical, ventilating, lighting and all material-handling equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Keep container tightly closed. Use only outdoors or in a well-ventilated area. Avoid release to the environment. Avoid breathing vapor. Wash hands thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace.

Response

: IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or physician if you feel unwell. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. IF ON SKIN: Wash with plenty of soap and water. Take off contaminated clothing and wash it before reuse. If skin irritation or rash occurs: Get medical attention. 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

physician.

Storage Disposal

: Store locked up. Store in a well-ventilated place. Keep cool.

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

Other hazards which do not result in classification

Other hazards which do not : Prolonged or repeated contact may dry skin and cause irritation.

Section 3. Composition/information on ingredients

Substance/mixture Other means of identification : Mixture: Not available.

CAS number/other identifiers

CAS number : Not applicable. **EC number** : Mixture.

Ingredient name	%	CAS number
reaction product: bisphenol-A-(epichlorhydrin); epoxy resin	10- <20	25068-38-6
Talc , not containing asbestiform fibres	10- <20	14807-96-6
xylene	5- <10	1330-20-7
Epoxy Resin (700 <mw<=1100)< td=""><td>5- <10</td><td>25036-25-3</td></mw<=1100)<>	5- <10	25036-25-3
2-methylpropan-1-ol	3- <5	78-83-1
Phenol, methylstyrenated	1- <3	68512-30-1
1,2,4,5-tetramethylbenzene	1- <3	95-93-2
ethylbenzene	1- <3	100-41-4

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.

Indonesia [:] Page: 2/14

Product code 00254360 Version 6.02 Date of issue 6 January 2020

Product name SIGMASHIELD 220 BASE

Section 3. Composition/information on ingredients

SUB codes represent substances without registered CAS Numbers.

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

Section 4. First aid measures

Description of necessary first aid measures

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.

Inhalation : Remove to fresh air. Keep person warm and at rest. If not breathing, if breathing is

irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by

trained personnel.

Skin contact : Remove contaminated clothing and shoes. Wash skin thoroughly with soap and

water or use recognized skin cleanser. Do NOT use solvents or thinners.

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

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

Most important symptoms/effects, acute and delayed

Potential acute health effects

Eye contact : Causes serious eye damage.

Inhalation : Harmful if inhaled. May cause respiratory irritation.

Skin contact : Causes skin irritation. Defatting to the skin. May cause an allergic skin reaction.

Ingestion : No known significant effects or critical hazards.

Over-exposure signs/symptoms

Eye contact : Adverse symptoms may include the following:

> watering redness

Inhalation : Adverse symptoms may include the following:

respiratory tract irritation

coughing

Skin contact : Adverse symptoms may include the following:

pain or irritation

redness dryness cracking

blistering may occur

Ingestion : Adverse symptoms may include the following:

stomach pains

Indication of immediate medical 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.

Indonesia Page: 3/14

Product name SIGMASHIELD 220 BASE

Section 4. First aid measures

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

Suitable extinguishing

media

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

Unsuitable extinguishing

media

: Do not use water jet.

Specific hazards arising from the chemical

: Flammable liquid and vapor. 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

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

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. 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.

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.

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.

Indonesia Page: 4/14

Product code 00254360 Version 6.02 Date of issue 6 January 2020

Product name SIGMASHIELD 220 BASE

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. 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 noncombustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Section 7. Handling and storage

Precautions for safe handling

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 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. Take precautionary measures against electrostatic discharges. 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.

including any incompatibilities

Conditions for safe storage, : 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.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Indonesia Page: 5/14

Date of issue 6 January 2020 Version 6.02

Product name SIGMASHIELD 220 BASE

Product code 00254360

Section 8. Exposure controls/personal protection

Ingredient name	Exposure limits
▼alc , not containing asbestiform fibres	Minister of Labor of the Republic of Indonesia (Indonesia, 4/2018).
	TWA: 2 mg/m³ 8 hours. Form: respirable
	fraction
xylene	Minister of Labor of the Republic of
	Indonesia (Indonesia, 4/2018).
	TWA: 434 mg/m ³ 8 hours.
	TWA: 100 BDS 8 hours.
	STEL: 651 mg/m³ 15 minutes. STEL: 150 BDS 15 minutes.
	Ministry of Employment and Labor
	(Indonesia, 2/1997).
	STEL: 651 mg/m³ 15 minutes.
	STEL: 150 BDS 15 minutes.
2-methylpropan-1-ol	Minister of Labor of the Republic of
	Indonesia (Indonesia, 4/2018). Absorbed
	through skin. TWA: 152 mg/m³ 8 hours.
	TWA: 50 BDS 8 hours.
ethylbenzene	Minister of Labor of the Republic of
,	Indonesia (Indonesia, 4/2018).
	TWA: 20 BDS 8 hours.
	Ministry of Employment and Labor
	(Indonesia, 2/1997).
	STEL: 543 mg/m³ 15 minutes.
	STEL: 125 BDS 15 minutes.

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. 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.

Individual protection measures

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.

Eye/face protection

: Chemical splash goggles and face shield.

Indonesia Page: 6/14

Product name SIGMASHIELD 220 BASE

Section 8. Exposure controls/personal protection

Skin protection

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. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves.

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

Appearance

Physical state : Liquid.
Color : Various
Odor : Amine-like.
Odor threshold : Not available.
PH : Not available.
Melting point : Not available.

Boiling point : >37.78°C (>100°F)

Flash point : Closed cup: 28°C (82.4°F)

Evaporation rate : Not available.
Flammability/Combustible : Not available.
properties (solid, gas)

Lower and upper explosive

(flammable) limits

: Greatest known range: Lower: 1.7% Upper: 10.9% (2-methylpropan-1-ol)

Vapor pressure : Not available.
Vapor density : Not available.

Relative density : 1.35

Solubility : Insoluble in the following materials: cold water.

Partition coefficient: n-

octanol/water

: Not available.

Auto-ignition temperature : Not available.

Decomposition temperature : Not available.

Indonesia Page: 7/14

Product name SIGMASHIELD 220 BASE

Section 9. Physical and chemical properties

Viscosity : Kinematic (room temperature): >4 cm²/s

Kinematic (40°C): >0.21 cm²/s

Section 10. Stability and reactivity

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

: Decomposition products may include the following materials: carbon monoxide, carbon dioxide, smoke, oxides of nitrogen.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
reaction product: bisphenol-A-(epichlorhydrin); epoxy	LD50 Dermal	Rabbit	>2 g/kg	-
resin				
	LD50 Oral	Rat	11.4 g/kg	-
xylene	LD50 Dermal	Rabbit	>1.7 g/kg	-
	LD50 Oral	Rat	4.3 g/kg	-
Epoxy Resin (700 <mw <="1100)</td"><td>LD50 Dermal</td><td>Rat</td><td>>2000 mg/kg</td><td>-</td></mw>	LD50 Dermal	Rat	>2000 mg/kg	-
,	LD50 Oral	Rat	>2000 mg/kg	_
2-methylpropan-1-ol	LC50 Inhalation Vapor	Rat	24.6 mg/l	4 hours
71 1	LD50 Dermal	Rabbit	2460 mg/kg	_
	LD50 Oral	Rat	2830 mg/kg	_
Phenol, methylstyrenated	LD50 Dermal	Rabbit	>2000 mg/kg	_
, , ,	LD50 Oral	Rat	>2000 mg/kg	_
1,2,4,5-tetramethylbenzene	LD50 Oral	Rat	6700 mg/kg	-
ethylbenzene	LC50 Inhalation Vapor	Rat	17.8 mg/l	4 hours
,	LD50 Dermal	Rabbit	17.8 g/kg	_
	LD50 Oral	Rat	3.5 g/kg	_

Conclusion/Summary Irritation/Corrosion

: There are no data available on the mixture itself.

Indonesia Page: 8/14

Product name SIGMASHIELD 220 BASE

Section 11. Toxicological information

Product/ingredient name	Result	Species	Score	Exposure	Observation
reaction product: bisphenol- A-(epichlorhydrin); epoxy resin	Skin - Moderate irritant	Rabbit	-	-	-
xylene	Eyes - Moderate irritant Skin - Moderate irritant	Rabbit Rabbit	-	- 24 hours 500 mg	-

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

•	Route of exposure	Species	Result
reaction product: bisphenol- A-(epichlorhydrin); epoxy resin	skin	Mouse	Sensitizing

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	Category	Route of exposure	Target organs
ralc , not containing asbestiform fibres	Category 3	Not applicable.	Respiratory tract irritation
xylene	Category 3	Not applicable.	Respiratory tract irritation
2-methylpropan-1-ol	Category 3	Not applicable.	Narcotic effects
	Category 3	Not applicable.	Respiratory tract irritation
1,2,4,5-tetramethylbenzene	Category 3	Not applicable.	Respiratory tract irritation

Specific target organ toxicity (repeated exposure)

Name	3 3 3	Route of exposure	Target organs
ethylbenzene	Category 2	Not determined	hearing organs

Aspiration hazard

Indonesia [:] Page: 9/14

Product code 00254360 Version 6.02 Date of issue 6 January 2020

Product name SIGMASHIELD 220 BASE

Section 11. Toxicological information

Name	Result
	ASPIRATION HAZARD - Category 1 ASPIRATION HAZARD - Category 1

Information on the likely

: Not available.

routes of exposure

Potential acute health effects

Eye contact : Causes serious eye damage.

Inhalation : Harmful if inhaled. May cause respiratory irritation.

Skin contact : Causes skin irritation. Defatting to the skin. 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 watering redness

Inhalation : Adverse symptoms may include the following:

respiratory tract irritation

coughing

Skin contact : Adverse symptoms may include the following:

pain or irritation

redness dryness cracking

blistering may occur

Ingestion Adverse symptoms may include the following:

stomach pains

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

Short term exposure

Potential immediate

effects

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.

Fertility effects

Potential immediate

: There are no data available on the mixture itself.

Potential delayed effects : There are no data available on the mixture itself.

Potential chronic health effects

General : 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 No known significant effects or critical hazards. Mutagenicity : No known significant effects or critical hazards. **Teratogenicity** No known significant effects or critical hazards. **Developmental effects** : No known significant effects or critical hazards.

Indonesia Page: 10/14

: No known significant effects or critical hazards.

Product code 00254360	Date of issue 6 January 2020	Version 6.02
Product name SIGMASHIELD 220 BASE		

Section 11. Toxicological information

Numerical measures of toxicity

Acute toxicity estimates

Route	ATE value
	7073.61 mg/kg 33.57 mg/l 4.31 mg/l

Other information

There are no data available on the mixture itself. The mixture has been assessed following the conventional method of the CLP Regulation (EC) No 1272/2008 and is classified for toxicological properties accordingly. See Sections 2 and 3 for details.

Exposure to component solvent vapor concentrations in excess of the stated occupational exposure limit may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on the kidneys, liver and central nervous system. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and, in extreme cases, loss of consciousness.

Solvents may cause some of the above effects by absorption through the skin. Repeated or prolonged contact with the mixture may cause removal of natural fat from the skin, resulting in non-allergic contact dermatitis and absorption through the skin.

If splashed in the eyes, the liquid may cause irritation and reversible damage.

Ingestion may cause nausea, diarrhea and vomiting.

This takes into account, where known, delayed and immediate effects and also chronic effects of components from short-term and long-term exposure by oral, inhalation and dermal routes of exposure and eye contact.

Contains reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight ≤ 700), Epoxy Resin (700<MW<=1100), Phenol, methylstyrenated. May produce an allergic reaction.

Section 12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
Feaction product: bisphenol- A-(epichlorhydrin); epoxy resin	Chronic NOEC 0.3 mg/l	Daphnia	21 days
2-methylpropan-1-ol ethylbenzene	Acute EC50 1100 mg/l Acute LC50 150 to 200 mg/l Fresh water	Daphnia Fish	48 hours 96 hours

Persistence/degradability

Product/ingredient name	Test	Result		Dose	Inoculum
reaction product: bisphenol- A-(epichlorhydrin); epoxy resin	OECD 301F	5 % - 28 days		-	-
Product/ingredient name	Aquatic half-life		Photolysis	S	Biodegradability
reaction product: bisphenol- A-(epichlorhydrin); epoxy resin	-		-		Not readily
xylene ethylbenzene	-		- -		Readily Readily

Indonesia Page: 11/14

Product name SIGMASHIELD 220 BASE

Section 12. Ecological information

Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
reaction product: bisphenol- A-(epichlorhydrin); epoxy	3	31	low
resin			
xylene	3.16	7.4 to 18.5	low
2-methylpropan-1-ol	0.76	-	low
1,2,4,5-tetramethylbenzene	4	-	high
ethylbenzene	3.15	79.43	low

Mobility in soil

Soil/water partition coefficient (Koc)

: 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 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. 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
UN number	UN1263	UN1263	UN1263
UN proper shipping name	PAINT	PAINT	PAINT
Transport hazard class(es)	3	3	3
Packing group	III	III	III
Environmental hazards	No.	No.	No.
Marine pollutant substances	Not applicable.	Not applicable.	Not applicable.

Indonesia Page: 12/14

Product name SIGMASHIELD 220 BASE

Section 14. Transport information

Additional information

UN : This class 3 viscous liquid is not subject to regulation in packagings up to 450 L according to

2.3.2.5.1.

IMDG : This class 3 viscous liquid is not subject to regulation in packagings up to 450 L according to

2.3.2.5.

IATA : None identified.

Special precautions for user : Transport within user's premises: always transport in closed containers that are

upright and secure. Ensure that persons transporting the product know what to do in

the event of an accident or spillage.

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).

Law No. 74/2001 - Banned

None of the components are listed.

Law No. 74/2001 - Restricted

Ingredient name	Status
Ethylene Oxide	Listed

Law No. 74/2001 - : Not determined

Chemicals that may be used

Section 16. Other information

History

Date of issue/Date of

revision

: 6 January 2020

Date of previous issue : 10/14/2019

Version : 6.02 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.

Indonesia Page: 13/14

Product name SIGMASHIELD 220 BASE

Section 16. Other information

Notice to reader

The information contained in this data sheet is based on present scientific and technical knowledge. The purpose of this information is to draw attention to the health and safety aspects concerning the products supplied by PPG, and to recommend precautionary measures for the storage and handling of the products. No warranty or guarantee is given in respect of the properties of the products. No liability can be accepted for any failure to observe the precautionary measures described in this data sheet or for any misuse of the products.

Indonesia Page: 14/14