# SAFETY DATA SHEET

pPG

SIGMADUR 520 BASE BASE Z (LEAD FREE COLOURS)

#### Date of issue 14 March 2024

Version 30.01

### 1. Product and company identification

Product name	: SIGMADUR 520 BASE BASE Z (LEAD FREE COLOURS)
Product code	: 00202814
Product type	: Liquid.
Relevant identified us	es 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	: Not applicable.
Supplier's details	: PPG PMC Japan Co., Ltd., 8F, Shintetsu Bldg., 1-1, Daikaidori 1-chome, Kobe 652-0803 Japan; Tel: +81-78-574-2777
Emergency telephone number	: 078 574 2777

# 2. Hazards identification

GHS Classification	: FLAMMABLE LIQUIDS - Category 3 SKIN IRRITATION - Category 2 EYE IRRITATION - Category 2A SKIN SENSITIZATION - Category 1 CARCINOGENICITY - Category 1A TOXIC TO REPRODUCTION - Category 1B SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) - Category 1 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3 SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 1 HAZARDOUS TO THE AQUATIC ENVIRONMENT - ACUTE HAZARD - Category 2 HAZARDOUS TO THE AQUATIC ENVIRONMENT - CHRONIC HAZARD - Category 2
GHS label elements Hazard pictograms	
Signal word	: Danger
Hazard statements	<ul> <li>Flammable liquid and vapor.</li> <li>Causes skin irritation.</li> <li>May cause an allergic skin reaction.</li> <li>Causes serious eye irritation.</li> <li>May cause drowsiness or dizziness.</li> <li>May cause cancer.</li> <li>May damage fertility or the unborn child.</li> </ul>
	lanen Dege: 4/45

Product code 00202814 Product name SIGMADUR 52	Date of issue 14 March 2024         Version 30.01           0 BASE BASE Z (LEAD FREE COLOURS)
2. Hazards identifi	cation
	Causes damage to organs. (central nervous system (CNS), kidneys, liver, respiratory organs) Causes damage to organs through prolonged or repeated exposure. (central nervous system (CNS), hearing organs, nervous system, respiratory organs) Toxic to aquatic life with long lasting effects.
Precautionary statements	
Prevention	: Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves, protective clothing and eye or face protection. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use only outdoors or in a well-ventilated area. Avoid release to the environment. Do not breathe vapor. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace.
Response	: Collect spillage. IF exposed or concerned: Call a POISON CENTER or doctor. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor if you feel unwell. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. 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	: Store locked up. Store in a well-ventilated place. Keep container tightly closed.
Disposal	: Dispose of contents and container in accordance with all local, regional, national and international regulations.
Other hazards which do not result in classification	: Prolonged or repeated contact may dry skin and cause irritation.

# 3. Composition/information on ingredients

Substance/mixture

: Mixture

#### **CAS number/other identifiers**

CAS number	: Not applicable.
CSCL number	: Not available.

Ingredient name	%	CAS number	CSCL
Xylene	15 - <20	1330-20-7	3-3; 3-60
Talc containing no asbestos or quartz	12.5 - <15	14807-96-6	Not available.
Hydrocarbons, C9, aromatics < 0.1% cumene	12.5 - <15	64742-95-6	Not available.
barium sulfate	7 - <10	7727-43-7	1-89
Solvent naphtha (petroleum), light aromatic	5 - <7	64742-95-6	Not available.
1,2,4-Trimethylbenzene	3 - <5	95-63-6	3-3427; 3-7
3-ethyltoluene	3 - <5	620-14-4	3-15
Ethylbenzene	3 - <5	100-41-4	3-28; 3-60
Propylene glycol monomethyl ether acetate	3 - <5	108-65-6	2-3144
Octadecanamide, N,N'-1,6-hexanediylbis	0.5 - <1	55349-01-4	2-3055
[12-hydroxy-			
bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate	0.2 - <0.5	41556-26-7	5-5501
crystalline silica (quartz)	0.2 - <0.5	14808-60-7	1-548

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.

Product name SIGMADUR 520 BASE BASE Z (LEAD FREE COLOURS)

### 3. Composition/information on ingredients

SUB codes represent substances without registered CAS Numbers.

### 4. First aid measures

<b>Description of necessary</b>	<u>irst aid measures</u>	
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.	
Inhalation	<ul> <li>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.</li> </ul>	
Skin contact	<ul> <li>Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water or use recognized skin cleanser. Do NOT use solvents or thinners.</li> </ul>	
Ingestion	: If swallowed, seek medical advice immediately and show this container or label. Keep person warm and at rest. Do NOT induce vomiting.	
	/effects, acute and delayed	
Potential acute health ef	<u>ects</u>	
Eye contact	: Causes serious eye irritation.	
Inhalation	: Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness.	
Skin contact	: Causes damage to organs following a single exposure in contact with skin. Causes skin irritation. Defatting to the skin. May cause an allergic skin reaction.	
Ingestion	: Causes damage to organs following a single exposure if swallowed. Can cause central nervous system (CNS) depression.	
Over-exposure signs/sy	<u>1ptoms</u>	
Eye contact	: Adverse symptoms may include the following: pain or irritation watering redness	
Inhalation	: Adverse symptoms may include the following: nausea or vomiting headache drowsiness/fatigue dizziness/vertigo unconsciousness reduced fetal weight increase in fetal deaths skeletal malformations	
Skin contact	: Adverse symptoms may include the following: irritation redness dryness cracking reduced fetal weight increase in fetal deaths skeletal malformations	
Ingestion	: Adverse symptoms may include the following: reduced fetal weight increase in fetal deaths skeletal malformations	
Indication of immediate n	edical attention and special treatment needed, if necessary	
Notes to physician	<ul> <li>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.</li> </ul>	
Specific treatments	: No specific treatment.	
	Japan Page: 3/1	5

### 4. First aid measures

**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)

5. Fire-fighting measures		
Extinguishing media		
Suitable extinguishing media	: Use dry chemical, $CO_2$ , 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 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 nitrogen oxides sulfur 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.	

### 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. 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 containment and cleaning up

6. Accidental release measures

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.

### 7. Handling and storage

**Precautions for safe** : Put on appropriate personal protective equipment (see Section 8). Persons with a handling 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. Avoid exposure during pregnancy. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. Avoid release to the environment. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Take precautionary measures against electrostatic discharges. Empty containers retain product residue and can be hazardous. Do not reuse container.

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.

### 8. Exposure controls/personal protection

#### **Control parameters**

**Occupational exposure limits** 

Ingredient name	Exposure limits
Xylene	Industrial Safety and Health Act (Japan, 6/2020). [xylene]
	TWA: 50 ppm 8 hours. Japan Society for Occupational Health (Japan, 9/2022).
	OEL-M: 50 ppm 8 hours. OEL-M: 217 mg/m <sup>3</sup> 8 hours.
Talc containing no asbestos or quartz	Japan Society for Occupational Health
	Japan Page: 5/15

(Japan, 9/2022), [Class 1 dusts (Activated charcoal, Alumina, Aluminus, Bentonité, Biatomité, Kaolinite, Pagodite, Pyrites, Pyrite, Cinder, Tale)]         1.2,4-Trimethylbenzene       (Japan, 9/2022), [Class 1 bust)         1.2,4-Trimethylbenzene       Japan Society for Occupational Health (Japan, 9/2022), Nosorbed Hrough skin. OEL-M: 20 ppm 8 hours. OEL-M: 87 mg/m 9 hours. OEL-M: 87 mg/m 9 hours. Japan Society for Occupational Health (Japan, 9/2022), Itespirable crystalline silical, or Occupational Health (Japan, 9/2022), Respirable crystalline silical, or State st			
crystalline silica (quartz)       TWA: 20 ppm 8 hours. Japan Society for Occupational Health (Japan, 9/2022). [Respirable crystalline silica]         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.         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 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       : 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 clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.         Eye 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 glove are still retaining their protective properties. It should be noted that the time t			<ul> <li>charcoal, Alumina, Aluminium, Bentonite Diatomite, Graphite, Kaolinite, Pagodite, Pyrites, Pyrite cinder, Talc)]</li> <li>OEL-M: 0.5 mg/m<sup>3</sup> 8 hours. Form: Respirable dust (Class 1 Dust)</li> <li>OEL-M: 2 mg/m<sup>3</sup> 8 hours. Form: Total dus (Class 1 Dust)</li> <li>Japan Society for Occupational Health (Japan, 9/2022).</li> <li>OEL-M: 120 mg/m<sup>3</sup> 8 hours.</li> <li>OEL-M: 25 ppm 8 hours.</li> <li>Japan Society for Occupational Health (Japan, 9/2022).</li> <li>OEL-M: 20 mg/m<sup>3</sup> 8 hours.</li> <li>OEL-M: 20 ppm 8 hours.</li> <li>OEL-M: 87 mg/m<sup>3</sup> 8 hours.</li> <li>OEL-M: 20 ppm 8 hours.</li> <li>Industrial Safety and Health Act (Japan, 9</li> </ul>
Recommended monitoring       : 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       : Emissions from ventilation or work process equipment should be checked to ensure cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.         Individual protection 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.         type 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 glove sare subil retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers.	crystalline silica (quartz)		TWA: 20 ppm 8 hours. Japan Society for Occupational Health (Japan, 9/2022). [Respirable crystalline silica]
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controlsthey 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: 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 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.		or other engineering controls to below any recommended or sta keep gas, vapor or dust concer	keep worker exposure to airborne contaminants atutory limits. The engineering controls also need to atrations below any lower explosive limits. Use
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 protection: Chemical splash goggles.Exin 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.		they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment	
<ul> <li>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.</li> <li>Chemical splash goggles.</li> <li>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.</li> </ul>	ndividual protection measu	<u>ires</u>	
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.	lygiene measures	eating, smoking and using the Appropriate techniques should Contaminated work clothing sh contaminated clothing before re	avatory and at the end of the working period. be used to remove potentially contaminated clothing ould not be allowed out of the workplace. Wash eusing. Ensure that eyewash stations and safety
<ul> <li>Hand protection</li> <li>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.</li> </ul>		: Chemical splash goggles.	
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Gloves : butyl rubber	Hand protection	be worn at all times when hand this is necessary. Considering check during use that the glove should be noted that the time to different for different glove man several substances, the protec	ling chemical products if a risk assessment indicates the parameters specified by the glove manufacturer, is are still retaining their protective properties. It b breakthrough for any glove material may be nufacturers. In the case of mixtures, consisting of
	Gloves	: butyl rubber	

#### 8. Exposure controls/personal protection : Personal protective equipment for the body should be selected based on the task **Body protection** 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 electricity, 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.

### 9. Physical and chemical properties

<u>Appearance</u>						
Physical state	: Liquid.					
Color	: Various					
Odor	: Aromatic.					
Boiling point	: >37.78°C (>100°F)					
Flash point	: ℤlosed cup: 35°C (95°F)					
Relative density	: 1.17					
Solubility(ies)	Media	Result				
Solubility(les)	cold water Not soluble					
Auto-ignition temperature	: 350°C (662°F)					
Viscosity	: 60 - 100 s (ISO 6mm)					

### 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	: Depending on conditions, decomposition products may include the following materials: carbon oxides nitrogen oxides sulfur oxides halogenated compounds metal oxide/oxides

Product name SIGMADUR 520 BASE BASE Z (LEAD FREE COLOURS)

### **11. Toxicological information**

#### Information on toxicological effects

#### Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Xylene	LD50 Dermal	Rabbit	1.7 g/kg	-
-	LD50 Oral	Rat	4.3 g/kg	-
Hydrocarbons, C9,	LD50 Dermal	Rabbit - Male,	>2000 mg/kg	-
aromatics < 0.1% cumene		Female		
	LD50 Oral	Rat	8400 mg/kg	-
barium sulfate	LD50 Dermal	Rat	>2000 mg/kg	-
	LD50 Oral	Rat	>5000 mg/kg	-
Solvent naphtha (petroleum),	LD50 Dermal	Rabbit	3.48 g/kg	-
light aromatic				
0	LD50 Oral	Rat	8400 mg/kg	-
1,2,4-Trimethylbenzene	LC50 Inhalation Vapor	Rat	18000 mg/m <sup>3</sup>	4 hours
•	LD50 Oral	Rat	5 g/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	-
Propylene glycol	LC50 Inhalation Vapor	Rat	30 mg/l	4 hours
monomethyl ether acetate			Ŭ	
	LD50 Dermal	Rabbit	>5 g/kg	-
	LD50 Oral	Rat	6190 mg/kg	-
bis(1,2,2,6,6-pentamethyl- 4-piperidyl) sebacate	LD50 Oral	Rat	3.125 g/kg	-

### Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
Xylene	Skin - Moderate irritant	Rabbit	-	24 hours 500	-
				mg	

#### **Sensitization**

Not available.

#### **Mutagenicity**

Not available.

#### **Carcinogenicity**

Not available.

#### Reproductive toxicity

Not available.

#### **Teratogenicity**

Not available.

#### Specific target organ toxicity (single exposure)

Name	Category	Route of exposure	Target organs
Xylene Talc containing no asbestos or quartz Solvent naphtha (petroleum), light aromatic 1,2,4-Trimethylbenzene	Category 1 Category 3 Category 1 Category 3 Category 3	- - - -	central nervous system (CNS), kidneys, liver, respiratory organs Narcotic effects respiratory organs Narcotic effects Respiratory tract irritation
	I	Ja	apan Page: 8/15

#### Specific target organ toxicity (repeated exposure)

Name	Category	Route of exposure	Target organs
Xylene	Category 1	-	nervous system, respiratory organs
Talc containing no asbestos or quartz	Category 1	-	respiratory organs
barium sulfate	Category 1	-	respiratory organs
1,2,4-Trimethylbenzene	Category 1	-	central nervous system (CNS), respiratory organs
Ethylbenzene	Category 1	-	hearing organs, nervous system
crystalline silica (quartz)	Category 1	-	immune system, kidneys, respiratory organs

#### **Aspiration hazard**

Name	Result
Xylene	ASPIRATION HAZARD - Category 1
Solvent naphtha (petroleum), light aromatic	ASPIRATION HAZARD - Category 1
1,2,4-Trimethylbenzene	ASPIRATION HAZARD - Category 1
3-ethyltoluene	ASPIRATION HAZARD - Category 1
Ethylbenzene	ASPIRATION HAZARD - Category 1

		headache drowsiness/fatigue dizziness/vertigo
		headache
		5
Inhalation	÷	Adverse symptoms may include the following: nausea or vomiting
		watering redness
Eye contact	1	Adverse symptoms may include the following: pain or irritation
		ical, chemical and toxicological characteristics
Ingestion	•	Causes damage to organs following a single exposure if swallowed. Can cause central nervous system (CNS) depression.
		skin irritation. Defatting to the skin. May cause an allergic skin reaction.
Skin contact		Causes damage to organs following a single exposure in contact with skin. Causes
Inhalation	:	Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness.
Eye contact	1	Causes serious eye irritation.
Potential acute health effects	<u>s</u>	
routes of exposure		

## **11. Toxicological information**

Product code 00202814

	increase in fetal deaths skeletal malformations
Skin contact	: Adverse symptoms may include the following: irritation redness dryness cracking reduced fetal weight increase in fetal deaths skeletal malformations
Ingestion	: Adverse symptoms may include the following: reduced fetal weight increase in fetal deaths skeletal malformations

Delayed and immediate effect	ts	and also chronic effects from short and long term exposure
<u>Short term exposure</u>		
Potential immediate effects	:	Not available.
Potential delayed effects	:	Not available.
Long term exposure		
Potential immediate effects	:	Not available.
Potential delayed effects	:	Not available.
Potential chronic health effe	ect	<u>S</u>
General	:	Causes damage to organs through prolonged or repeated exposure. Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis. Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.
Carcinogenicity	1	May cause cancer. Risk of cancer depends on duration and level of exposure.
Mutagenicity	:	No known significant effects or critical hazards.
Reproductive toxicity	:	May damage fertility or the unborn child.

#### Numerical measures of toxicity

#### Acute toxicity estimates

Product/ingredient name	Oral (mg/ kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapors) (mg/l)	Inhalation (dusts and mists) (mg/l)
SIGMADUR 520 BASE BASE Z (LEAD FREE COLOURS)	N/A	4719.8	N/A	42.3	N/A
Xylene	4300	1700	N/A	11	N/A
Hydrocarbons, C9, aromatics < 0.1% cumene	8400	2500	N/A	N/A	N/A
barium sulfate	N/A	2500	N/A	N/A	N/A
Solvent naphtha (petroleum), light aromatic	8400	3480	N/A	N/A	N/A
1,2,4-Trimethylbenzene	5000	N/A	N/A	18	N/A
Ethylbenzene	3500	17800	N/A	17.8	N/A
Propylene glycol monomethyl ether acetate	6190	N/A	N/A	30	N/A
bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate	3125	N/A	N/A	N/A	N/A

#### Other information

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Product code 00202814

#### Product name SIGMADUR 520 BASE BASE Z (LEAD FREE COLOURS)

### 11. Toxicological information

Prolonged or repeated contact may dry skin and cause irritation. 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. Avoid contact with skin and clothing.

### **12. Ecological information**

#### <u>Toxicity</u>

Product/ingredient name	Result	Species	Exposure
Hydrocarbons, C9, aromatics < 0.1% cumene	LC50 9.2 mg/l	Fish	96 hours
Solvent naphtha (petroleum), light aromatic	Acute LC50 8.2 mg/l	Fish	96 hours
Ethylbenzene	Acute EC50 1.8 mg/l Fresh water Chronic NOEC 1 mg/l Fresh water	Daphnia Daphnia - <i>Ceriodaphnia dubia</i>	48 hours -
Propylene glycol monomethyl ether acetate	Acute LC50 134 mg/l Fresh water	Fish - Oncorhynchus mykiss	96 hours

#### Persistence/degradability

Product/ingredient name	Test	Result		Dose		Inoculum
Hydrocarbons, C9, aromatics < 0.1% cumene	-	78 % - 28 c	lays Idily - 10 days	-		-
Ethylbenzene Propylene glycol monomethyl ether acetate	-		dily - 28 days	-		-
Product/ingredient name	Aquatic half-l	ife	Photolysis		Biode	gradability
Xylene Hydrocarbons, C9, aromatics < 0.1% cumene Ethylbenzene Propylene glycol monomethyl ether acetate	- - -		- - -		Readil Readil Readil Readil	y y

#### **Bioaccumulative potential**

Product/ingredient name	LogPow	BCF	Potential
Xylene	3.12	7.4 to 18.5	Low
Hydrocarbons, C9,	3.7 to 4.5	10 to 2500	High
aromatics < 0.1% cumene			
1,2,4-Trimethylbenzene	3.63	120.23	Low
3-ethyltoluene	3.98	-	Low
Ethylbenzene	3.6	79.43	Low
Propylene glycol monomethyl ether acetate	1.2	-	Low

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

Other adverse effects

: No known significant effects or critical hazards.

### 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.

### 14. Transport information

	UN	IMDG	ΙΑΤΑ
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.

#### 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	<ul> <li>This class 3 viscous liquid is not subject to regulation in packagings up to 450 L according to 2.3.2.5.</li> </ul>
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.

Transport in bulk according : Not applicable. to IMO instruments

#### Product code 00202814

Product name SIGMADUR 520 BASE BASE Z (LEAD FREE COLOURS)

## 15. Regulatory information

#### Fire Service Law

Category	Substance name/Type	Danger category	Signal word	Designated quantity
Category IV	Class II petroleums	III	Flammable - Keep Fire Away	1000 L

#### Pollutant Release and Transfer Registers (PRTR)

Ingredient name	%	Status	Reference number
Xylene Trimethylbenzene	18 5.1	Class 1 Class 1	80 691
Ethylbenzene	3.2	Class 1	53

#### **Industrial Safety and Health Act**

### Ordinance on the Prevention of the Hazard due to Specified Chemical Substances

Ingredient name	%		Reference number
Ethyl benzene		Group-2 Substances under Supervision	3-3

#### Substance(s) requiring labelling

Ingredient name	%	Status	Reference number
5	≥10 - ≤20	Listed	136
	≥10 - ≤20	Listed	330
	≤10	Listed	70
	≤10	Listed	165-2

#### **Chemicals requiring notification**

Ingredient name	%	Status	Reference number
	≥10 - ≤20	Listed	136
	≥10 - ≤20	Listed	330
	≤10	Listed	70
	≤10	Listed	165-2

#### Carcinogens based on Article 577-2 of the Ordinance on ISH

None of the components are listed.

#### <u>Mutagen</u>

None of the components are listed.

Corrosive liquid	: Not listed
Occupational Safety and Health Law	: Inflammable
Regulations on the Prevention of Tetraalkyl Lead Poisoning	: Not listed
Harmful Substances Subject to Obtaining Permission for Manufacturing	: Not listed

### 15. Regulatory information

Harmful Substances, Prohibited for Manufacturing	: Not listed
ISHL Enforcement Order Appendix 1 - Dangerous Substances	: Inflammable
Lead regulation	: Not listed
Organic solvents poisoning prevention	: Class 2

#### **Poisonous and Deleterious Substances**

None of the components are listed.

#### **Chemical Substances Control Law (CSCL)**

Ingredient name	%	Status	Reference number
Xylene	≥10 - ≤20	Priority assessment	125
1,2,4-Trimethylbenzene	≤10	Priority assessment	49
Ethylbenzene	≤10	Priority assessment	50
1,3,5-Trimethylbenzene	≤10	Priority assessment	201
Toluene	≤10	Priority assessment	46
Benzene	≤10	Priority assessment	45
Cumene	≤10	Priority assessment	126
2,6-Di-tert-butyl-4-methylphenol	≤10	Priority assessment	64

High Pressure Gas Control : Not available. Law

#### **Explosives Control Law**

None of the components are listed.

Law concerning prevention : Not available. of pollution of the ocean

#### Maritime Safety Law

#### Notification Regulating Transportation of Dangerous Materials by Sea

None of the components are listed.

#### **Container class**

None of the components are listed.

JSOH Carcinogen	:	Group 1
List of Specially Controlled Industrial Waste	:	Not listed
Japan inventory	:	Not determined.
Road law	:	Not available.

**16. Other information** 

<u>History</u>	
Date of issue/Date of revision	: 14 March 2024
Date of previous issue	: 3/13/2024
Version	: 30.01
Prepared by	: EHS
Key to abbreviations	<ul> <li>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</li> </ul>

✓ Indicates information that has changed from previously issued version.

#### 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.