# **SAFETY DATA SHEET**

Safety Data Sheet according to GB/T 16483-2008 and GB/T 17519-2013



Date of issue/Date of revision 1 February 2024

Version 5

01101011	

Section 1. Chemical product and company identification		
Product code	: 00359453	
Product name	: SIGMADUR 540 BASE RAL 1026	
Product name	: SIGMADUR 540 BASE RAL 1026	
Product type	: Liquid.	
Relevant identified uses o	f 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 Coatings (Kunshan) Co., Ltd 53 Jinyang Road, Lujia Town, 215331 Kunshan City, Jiangsu Province, P.R. China Tel: 86 512 57678859 Fax: 86 512 57678857	
Emergency telephone number (with hours of operation)	: 00 86 532 83889090	

## Section 2. Hazards identification

Classification of the substance or mixture according to GB 13690-2009 and GB 30000-2013

Emergency overview Liquid. Characteristic. Fammable liquid and vapor. May be harmful in contact with skin. Causes skin irritation. Causes serious eye irritation. Suspected of causing cancer. May damage fertility or the unborn child. Toxic to aquatic life. Harmful to aquatic life with long lasting effects. Prolonged or repeated contact may dry skin and cause irritation.

IF exposed or concerned: Get medical advice or attention. IF ON SKIN: Call a POISON CENTER or doctor if you feel unwell. If skin irritation occurs: Get medical advice or attention. If eye irritation persists: Get medical advice or attention.

#### See Section 12 for environmental precautions.

Section 2. Hazards identification		
Classification of the substance or mixture	<ul> <li>AMMABLE LIQUIDS - Category 3 ACUTE TOXICITY (dermal) - Category 5 SKIN CORROSION/IRRITATION - Category 2 SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2A CARCINOGENICITY - Category 2 TOXIC TO REPRODUCTION - Category 1B AQUATIC HAZARD (ACUTE) - Category 2 AQUATIC HAZARD (LONG-TERM) - Category 3</li> <li>Fercentage of the mixture consisting of ingredient(s) of unknown acute dermal toxicity: 50.2%</li> <li>Percentage of the mixture consisting of ingredient(s) of unknown hazards to the</li> </ul>	
	aquatic environment: 42.3%	
GHS label elements		
Hazard pictograms		
Signal word	: Danger	
Hazard statements	<ul> <li>Fammable liquid and vapor. May be harmful in contact with skin. Causes skin irritation. Causes serious eye irritation. Suspected of causing cancer. May damage fertility or the unborn child. Toxic to aquatic life. Harmful to aquatic life with long lasting effects.</li> </ul>	
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 explosion-proof electrical, ventilating or lighting equipment. Use non-sparking tools. Take action to prevent static discharges. Keep container tightly closed. Avoid release to the environment. Wash thoroughly after handling.	
Response	: IF exposed or concerned: Get medical advice or attention. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. IF ON SKIN: Call a POISON CENTER or doctor if you feel unwell. Wash with plenty of water. If skin irritation 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.	
Suitable extinguishing media	: Use dry chemical, CO <sub>2</sub> , water spray (fog) or foam.	
Storage	: Store locked up. Store in a well-ventilated place. Keep cool.	
Disposal	: Dispose of contents and container in accordance with all local, regional, national and international regulations.	
Physical and chemical hazards	: Flammable liquid and vapor.	

### Section 2. Hazards identification

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: Causes skin irritation. Causes serious eye irritation. Suspected of causing cancer. May damage fertility or the unborn child. Prolonged or repeated contact may dry skin and cause irritation.

#### Symptoms related to the physical, chemical and toxicological characteristics

Eye contact	: Adverse symptoms may include the following: pain or irritation watering redness
Inhalation	: Adverse symptoms may include the following: 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

Delayed and immediate effec	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.
Environmental hazards	: Toxic to aquatic life. Harmful to aquatic life with long lasting effects.
Other hazards which do not result in classification	: Prolonged or repeated contact may dry skin and cause irritation.

## Section 3. Composition/information on ingredients

#### Substance/mixture

: Mixture

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

CAS number :

: Not applicable.

### Section 3. Composition/information on ingredients

Ingredient name	%	CAS number
barium sulfate	10 - <25	7727-43-7
n-butyl acetate	10 - <25	123-86-4
xylene isomers mixture	1 - <10	1330-20-7
2-methylpropan-1-ol	1 - <10	78-83-1
Solvent naphtha (petroleum), light aromatic	1 - <10	64742-95-6
dimethyl glutarate	1 - <10	1119-40-0
ethylbenzene	1 - <10	100-41-4
1,2,4-trimethylbenzene	1 - <10	95-63-6
3-ethyltoluene	1 - <10	620-14-4
trizinc bis(orthophosphate)	1 - <10	7779-90-0
Hexanoic acid, 2-ethyl-, zinc salt, basic	0.1 - <1	85203-81-2
bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate	0.1 - <1	41556-26-7
toluene	0.1 - <1	108-88-3

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. SUB codes represent substances without registered CAS Numbers.

### Section 4. First aid measures

#### Description of necessary first aid measures

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.
Most important sympton	oms/effects, acute and delayed
Potential acute health	<u>effects</u>
Eye contact	: Causes serious eye irritation.
Inhalation	: No known significant effects or critical hazards.

**Skin contact** : May be harmful in contact with skin. Causes skin irritation. Defatting to the skin.

	No known	significant	effects or	critical hazards.
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Over-exposure signs/symptoms

Ingestion

Eye contact	: Adverse symptoms may include the following: pain or irritation watering redness
Inhalation	: Adverse symptoms may include the following: reduced fetal weight increase in fetal deaths skeletal malformations

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### Section 4. First aid measures

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 me	dical 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.
	and eaging that hater belore removing it, or wear gioves.

See toxicological information (Section 11)

## Section 5. Fire-fighting measures

Extinguishing media	
Suitable extinguishing media	: Use dry chemical, CO <sub>2</sub> , 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. 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 sulfur oxides phosphorus oxides 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.

### 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, protect	tive equipment and emergency procedures
For non-emergency personnel	<ul> <li>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.</li> </ul>
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 co	ontainment and cleaning up
Small spill	: Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

Large spill
 Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

### Section 7. Handling and storage

Precautions for safe : handling	♥ut on appropriate personal protective equipment (see Section 8). 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 ingest. Avoid breathing vapor or mist. Avoid release to the environment. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Take precautionary measures against electrostatic
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### Section 7. Handling and storage

discharges. Empty containers retain product residue and can be hazardous. Do not reuse container.

#### Conditions for safe storage, including any incompatibilities : Store between the following temperatures: 0 to 35°C (32 to 95°F). Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

### Section 8. Exposure controls/personal protection

#### **Control parameters**

#### **Occupational exposure limits**

Ingredient name	Exposure limits
parium sulfate	GBZ 2.1 (China, 11/2022).
	PC-TWA: 10 mg/m <sup>3</sup> , (as Ba) 8 hours.
n-butyl acetate	GBZ 2.1 (China, 11/2022).
	PC-STEL: 300 mg/m <sup>3</sup> 15 minutes.
	PC-TWA: 200 mg/m <sup>3</sup> 8 hours.
xylene isomers mixture	GBZ 2.1 (China, 11/2022). [Xylene (all
	isomers)]
	PC-STEL: 100 mg/m <sup>3</sup> 15 minutes.
	PC-TWA: 50 mg/m <sup>3</sup> 8 hours.
2-methylpropan-1-ol	ACGIH TLV (United States, 1/2023).
	TWA: 152 mg/m <sup>3</sup> 8 hours.
	TWA: 50 ppm 8 hours.
ethylbenzene	GBZ 2.1 (China, 11/2022).
	PC-STEL: 150 mg/m <sup>3</sup> 15 minutes.
	PC-TWA: 100 mg/m <sup>3</sup> 8 hours.
1,2,4-trimethylbenzene	ACGIH TLV (United States, 1/2023).
	TWA: 10 ppm 8 hours.
toluene	GBZ 2.1 (China, 11/2022). Absorbed
	through skin.
	PC-STEL: 100 mg/m <sup>3</sup> 15 minutes.
	PC-TWA: 50 mg/m <sup>3</sup> 8 hours.

Appropriate engineering	: Use only with adequate ventilation. Use process enclosures, local exhaust
controls	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.

## Section 8. Exposure controls/personal protection

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 measu	ures	
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. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
Eye protection	1	Chemical splash goggles.
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	:	For prolonged or repeated handling, use the following type of gloves:
		Recommended: neoprene, natural rubber (latex), Chloroprene, polyvinyl alcohol (PVA), Viton®, butyl rubber May be used: nitrile 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

<u>Appearance</u>	
Physical state	: Liquid.
Odor	: Characteristic.
Boiling point	: >37.78°C (>100°F)
Flash point	: Closed cup: 26°C (78.8°F)
Lower and upper explosive (flammable) limits	: Greatest known range: Lower: 1.7% Upper: 10.9% (2-methylpropan-1-ol)

### Section 9. Physical and chemical properties

Relative density	: 1.44		
Solubility(ies)	Media	Result	
Solubility(les)	. cold water	Not soluble	
Viscosity	: Kinematic (40°C):	>21 mm²/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	:	Depending on conditions, decomposition products may include the following materials: carbon oxides sulfur oxides phosphorus oxides metal oxide/oxides

## Section 11. Toxicological information

#### Information on toxicological effects

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Result	Species	Dose	Exposure
LD50 Dermal	Rat	>2000 mg/kg	-
LD50 Oral	Rat	>5000 mg/kg	-
LC50 Inhalation Vapor	Rat	>21.1 mg/l	4 hours
LC50 Inhalation Vapor	Rat	2000 ppm	4 hours
LD50 Dermal	Rabbit	>17600 mg/kg	-
LD50 Oral	Rat	10.768 g/kg	-
LD50 Dermal	Rabbit	1.7 g/kg	-
LD50 Oral	Rat	4.3 g/kg	-
LC50 Inhalation Vapor	Rat	24.6 mg/l	4 hours
LD50 Dermal	Rabbit	2460 mg/kg	-
LD50 Oral	Rat	2830 mg/kg	-
LD50 Dermal	Rabbit	3.48 g/kg	-
LD50 Oral	Rat	8400 mg/kg	-
LC50 Inhalation Dusts and mists	Rat	>11 mg/l	4 hours
LD50 Dermal	Rabbit	>5000 mg/kg	-
LD50 Oral	Rat	00	-
LC50 Inhalation Vapor	Rat	00	4 hours
LD50 Dermal	Rabbit	17.8 g/kg	-
LD50 Oral	Rat	3.5 g/kg	
	LD50 Oral LC50 Inhalation Vapor LC50 Inhalation Vapor LD50 Dermal LD50 Oral LD50 Oral LD50 Oral LC50 Inhalation Vapor LD50 Oral LD50 Oral LD50 Oral LD50 Oral LC50 Inhalation Dusts and mists LD50 Dermal LD50 Oral LC50 Inhalation Vapor	LD50 OralRatLC50 Inhalation VaporRatLC50 Inhalation VaporRatLD50 DermalRabbitLD50 OralRatLD50 OralRatLD50 OralRatLD50 OralRatLD50 OralRatLD50 OralRatLD50 OralRatLD50 DermalRatLD50 DermalRatLD50 OralRatLD50 OralRatLD50 OralRatLD50 OralRatLD50 OralRatLD50 OralRatLD50 DermalRatLD50 DermalRatLD50 DermalRatLD50 DermalRatLD50 OralRatLD50 OralRatLD50 OralRatLD50 OralRatLD50 OralRatLD50 OralRatLD50 OralRatLD50 OralRatLD50 OralRat	LD50 OralRat>5000 mg/kgLC50 Inhalation VaporRat>21.1 mg/lLC50 Inhalation VaporRat2000 ppmLD50 DermalRat17600 mg/kgLD50 OralRat10.768 g/kgLD50 DermalRat10.768 g/kgLD50 OralRat4.3 g/kgLD50 OralRat24.6 mg/lLD50 DermalRat2460 mg/kgLD50 DermalRat2480 mg/kgLD50 DermalRat2830 mg/kgLD50 OralRat2830 mg/kgLD50 OralRat3.48 g/kgLD50 OralRat>11 mg/lAnd mistsRabbit>5000 mg/kgLD50 OralRat>5000 mg/kgLD50 OralRat>5000 mg/kgLD50 DermalRat>5000 mg/kgLD50 OralRat>5000 mg/kgLD5

### Section 11. Toxicological information

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1,2,4-trimethylbenzene	LC50 Inhalation Vapor	Rat	18000 mg/m³	4 hours
	LD50 Oral	Rat	5 g/kg	-
trizinc bis(orthophosphate)	LC50 Inhalation Dusts	Rat	>5.7 mg/l	4 hours
	and mists			
	LD50 Oral	Rat	>5000 mg/kg	-
bis(1,2,2,6,6-pentamethyl-	LD50 Oral	Rat	3.125 g/kg	-
4-piperidyl) sebacate				
toluene	LC50 Inhalation Vapor	Rat	49 g/m³	4 hours
	LD50 Dermal	Rabbit	8.39 g/kg	-
	LD50 Oral	Rat	5580 mg/kg	-

#### Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
xylene isomers mixture	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
-butyl acetate	Category 3	-	Narcotic effects
2-methylpropan-1-ol	Category 3	-	Respiratory tract irritation
	Category 3		Narcotic effects
Solvent naphtha (petroleum), light aromatic	Category 3	-	Narcotic effects
1,2,4-trimethylbenzene	Category 3	-	Respiratory tract irritation
toluene	Category 3	-	Narcotic effects

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

Name		Route of exposure	Target organs
ethylbenzene	Category 2	-	-
toluene	Category 2	-	-

**Aspiration hazard** 

Product name SIGMADUR 540 BASE RAL 1026

### Section 11. Toxicological information

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Name	Result
Solvent naphtha (petroleum), light aromatic	ASPIRATION HAZARD - Category 1
ethylbenzene	ASPIRATION HAZARD - Category 1
3-ethyltoluene	ASPIRATION HAZARD - Category 1
toluene	ASPIRATION HAZARD - Category 1

Information on the likely routes of exposure	1	Not available.
Potential acute health effects		
Eye contact	1	Causes serious eye irritation.
Inhalation	1	No known significant effects or critical hazards.
Skin contact	1	May be harmful in contact with skin. Causes skin irritation. Defatting to the skin.
Ingestion	1	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	: Adverse symptoms may include the following: 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

Delayed and immediate effect	nd also chronic effects from short and long term exposure	
<u>Short term exposure</u>		
Potential immediate effects	Not available.	
Potential delayed effects	Not available.	
<u>Long term exposure</u>		
Potential immediate effects	Not available.	
Potential delayed effects	Not available.	
Potential chronic health eff		
General	Prolonged or repeated contact can defat the skin and lead to irritation, cracking or dermatitis.	and/

### Section 11. Toxicological information

Carcinogenicity	:	Suspected of causing cancer. Risk of cancer depends on duration and level of exposure.
Mutagenicity Reproductive toxicity	:	No known significant effects or critical hazards. 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)
GMADUR 540 BASE RAL 1026	22429.7	4297.0	N/A	89.9	10.7
barium sulfate	N/A	2500	N/A	N/A	N/A
n-butyl acetate	10768	N/A	N/A	N/A	N/A
xylene isomers mixture	4300	1700	N/A	11	1.5
2-methylpropan-1-ol	2830	2460	N/A	24.6	N/A
Solvent naphtha (petroleum), light aromatic	8400	3480	N/A	N/A	N/A
ethylbenzene	3500	17800	N/A	17.8	1.5
1,2,4-trimethylbenzene	5000	N/A	N/A	18	1.5
bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate	3125	N/A	N/A	N/A	N/A
toluene	5580	8390	N/A	49	N/A

#### Other 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.

## Section 12. Ecological information

#### **Toxicity**

Product/ingredient name	Result	Species	Exposure
p-butyl acetate	Acute LC50 18 mg/l	Fish	96 hours
2-methylpropan-1-ol	Acute EC50 1100 mg/l	Daphnia	48 hours
Solvent naphtha (petroleum), light aromatic	Acute LC50 8.2 mg/l	Fish	96 hours
ethylbenzene	Acute EC50 1.8 mg/l Fresh water	Daphnia	48 hours
	Chronic NOEC 1 mg/l Fresh water	Daphnia - Ceriodaphnia dubia	-
trizinc bis(orthophosphate)	Acute LC50 0.112 mg/l Chronic NOEC 0.026 mg/l	Fish Fish	96 hours 30 days

#### Persistence/degradability

Product/ingredient name	Test	Result	Dose	Inoculum
-butyl acetate	TEPA and OECD 301D	83 % - Readily - 28 days	-	-
ethylbenzene	-	79 % - Readily - 10 days	-	-

Product name SIGMADUR 540 BASE RAL 1026

### Section 12. Ecological information

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
✓butyl acetate xylene isomers mixture ethylbenzene toluene	- - -	- - -	Readily Readily Readily Readily

#### **Bioaccumulative potential**

Product/ingredient name	LogPow	BCF	Potential
-butyl acetate	2.3	-	Low
xylene isomers mixture	3.12	7.4 to 18.5	Low
2-methylpropan-1-ol	1	-	Low
dimethyl glutarate	0.49	-	Low
ethylbenzene	3.6	79.43	Low
1,2,4-trimethylbenzene	3.63	120.23	Low
3-ethyltoluene	3.98	-	Low
toluene	2.73	8.32	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

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: The generation of waste should be avoided or minimized wherever possible.
Disposal methods
                                  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.
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### Section 14. Transport information

Product name SIGMADUR 540 BASE RAL 1026

### Section 14. Transport information

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	China	UN	IMDG	ΙΑΤΑ
UN number	UN1263	UN1263	UN1263	UN1263
UN proper shipping name	PAINT	PAINT	PAINT	PAINT
Transport hazard class(es)	3	3	3	3
Packing group	111	111	111	111
Environmental hazards	No.	No.	No.	No.
Marine pollutant substances	Not applicable.	Not applicable.	Not applicable.	Not applicable.

#### **Additional information**

CN	: None identified.
UN	: None identified.
IMDG	: None identified.
ΙΑΤΑ	: 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

### Section 15. Regulatory information

#### China inventory (IECSC) : All components are listed or exempted.

References

: Production Safety Law of the People's Republic of China Code of Occupational Disease Prevention of the People's Republic of China Environmental Protection Law of the People's Republic of China Fire Control Law of the People's Republic of China Regulations on the Control over Safety of Dangerous Chemicals Occupational exposure limits for hazardous agents in the workplace chemical hazardous agents (GBZ2.1) General rule for classification and hazard communication of chemicals (GB13690) Safety data sheet for chemical products - Content and order of sections (GB/ T16483) Guidance on the compilation of safety data sheet for chemical products (GB/ T17519) General rule for preparation of precautionary label for chemicals (GB15258) Safety rules for classification, precautionary labeling and precautionary statements of chemicals (GB30000.2-29)

### Section 16. Other information

: 1 February 2024
: 3/17/2023
: 5
EHS
: 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

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.