SAFETY DATA SHEET

SIGMADUR 520 MAT BASE RAL 7012



Date of issue 16 January 2025

Version 2

1. Product and company identification

Product name	: SIGMADUR 520 MAT BASE RAL 7012
Product code	: 00468573
Product type	: Liquid.
Relevant identified uses	of the substance or mixture and uses advised against
Product use	: Professional applications, Used by spraying.
Use of the substance/ mixture	: Coating.
Uses advised against	: 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

	 FLAMMABLE LIQUIDS - Category 3 SKIN IRRITATION - Category 2 EYE IRRITATION - Category 2A CARCINOGENICITY - Category 1B 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 3 HAZARDOUS TO THE AQUATIC ENVIRONMENT - CHRONIC HAZARD -
GHS label elements	Category 2
Hazard pictograms	
	: Danger

2. Hazards identification

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.
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 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.
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

: Mixture

Substance/mixture

CAS number/other identifiers

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

Ingredient name	%	CAS number	CSCL
2-Propenoic acid, homopolymer	20 - <25	9003-01-4	6-898
Xylene	15 - <20	1330-20-7	3-3; 3-60
Talc (containing no asbestos or quartz)	12.5 - <15	14807-96-6	Not available.
barium sulfate	10 - <12.5	7727-43-7	1-89
Solvent naphtha (petroleum), light aromatic	7 - <10	64742-95-6	Not available.
Ethyl Benzene	5 - <7	100-41-4	3-28; 3-60
1,2,4-Trimethylbenzene	3 - <5	95-63-6	3-3427; 3-7
Titanium dioxide (excluding nanoparticle)	3 - <5	13463-67-7	1-558; 5-5225
Propylene glycol monomethyl ether acetate	3 - <5	108-65-6	2-3144
Amorphous silica (silica gel, precipitated silica)	2 - <3	112926-00-8	1-548
carbon black	0.5 - <1	1333-86-4	5-3328; 5-5222
Octadecanamide, N,N'-1,6-hexanediylbis	0.2 - <0.5	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
Cumene	0.1 - <0.2	98-82-8	3-22

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.

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	: 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 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.
Ingestion :	Causes damage to organs following a single exposure if swallowed. Can cause central nervous system (CNS) depression.
Over-exposure signs/sympton	<u>ms</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 medica	al 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.

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 sulfur 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.	
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

handling	Put 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 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.
	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

with local regulations. Store in a segregated and approved area. Store in accordance ontainer 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
x ylene	Japan Society for Occupational Health (Japan, 5/2023) OEL-M 8 hours: 50 ppm. OEL-M 8 hours: 217 mg/m ³ . Industrial Safety and Health Act (Japan, 6/2020) [xylene] TWA 8 hours: 50 ppm.
Talc , not containing asbestiform fibres	Japan Society for Occupational Health (Japan, 5/2023) [Class 1 dusts (Activated charcoal, Alumina, Aluminium, Bentonite,
	Japan Page: 5/16

8. Exposure controls/personal protection

		Diatomite, Graphite, Kaolinite, Pagodite,
		Pyrites, Pyrite cinder)]
		OEL-M 8 hours: 2 mg/m ³ . Form: Total dust
		(Class 1 Dust).
		OEL-M 8 hours: 0.5 mg/m ³ . Form:
		Respirable dust (Class 1 Dust).
ethylbenzene		Japan Society for Occupational Health
		(Japan, 5/2023) Absorbed through skin.
		OEL-M 8 hours: 20 ppm.
		OEL-M 8 hours: 87 mg/m ³ .
		Industrial Safety and Health Act (Japan,
		6/2020)
		TWA 8 hours: 20 ppm.
1,2,4-trimethylbenzene		Japan Society for Occupational Health
		(Japan, 5/2023)
		OEL-M 8 hours: 25 ppm.
titanium dioxide		OEL-M 8 hours: 120 mg/m ³ .
		Japan Society for Occupational Health
		(Japan, 5/2023) [titanium dioxide]
		OEL-M 8 hours: 1.5 mg/m ³ (as Ti). Form:
		Respirable particulate matter.
		OEL-M 8 hours: 2 mg/m³ (as Ti). Form:
		Total particulate matter.
		Japan Society for Occupational Health
		(Japan, 5/2023) [titanium dioxide
		(nanoparticle)]
		OEL-M 8 hours: 0.3 mg/m ³ . Form:
		nanoparticle.
cumene		Japan Society for Occupational Health
		(Japan, 5/2023) Absorbed through skin.
		OEL-M 8 hours: 50 mg/m ³ .
		OEL-M 8 hours: 10 ppm.
		Technical Guideline Concerning the
		Applications, etc. of Concentration
		Standard for Preventing Health Hazards
		(Japan, 4/2023)
		TWA 8 hours: 10 ppm.
•	: Reference should be made to appropri	
procedures		ods for the determination of hazardous
	substances will also be required.	
Appropriate engineering	: Use only with adequate ventilation. Us	e process enclosures, local exhaust ventilation
controls		vorker exposure to airborne contaminants
	below any recommended or statutory li	imits. The engineering controls also need to
		below any lower explosive limits. Use
	explosion-proof ventilation equipment.	
Environmental exposure		cess equipment should be checked to ensure
Environmental exposure	: Emissions from ventilation or work pro	cess equipment should be checked to ensure
Environmental exposure controls	: Emissions from ventilation or work pro- they comply with the requirements of e	nvironmental protection legislation. In some
	: Emissions from ventilation or work pro- they comply with the requirements of e	nvironmental protection legislation. In some eering modifications to the process equipment

Individual protection measures

8 Exposure controls/personal protection

o. Exposure cor	itrois/personal protection
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	: 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.
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.

9. Physical and chemical properties

<u>Appearance</u>			
Physical state	: Liquid.		
Color	: Gray.		
Odor	: Aromatic.		
Boiling point	: >37.78°C (>100°F)		
Flash point	: Closed cup: 30°C (8	6°F)	
Relative density	: 1.27		
Solubility(ies)	Media	Result	
Solubility(les)	cold water	Not soluble	

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.		

materials: carbon oxides sulfur oxides metal oxide/oxides

11. Toxicological information

Information on toxicological effects

products

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
2-Propenoic acid,	LD50 Dermal	Rabbit	3 g/kg	-
homopolymer				
	LD50 Oral	Rat	2500 mg/kg	-
Xylene	LD50 Dermal	Rabbit	1.7 g/kg	-
	LD50 Oral	Rat	4.3 g/kg	-
barium sulfate	LD50 Dermal	Rat	>2000 mg/kg	-
	LD50 Oral	Rat	>5000 mg/kg	-
Solvent naphtha (petroleum), light aromatic	LD50 Dermal	Rabbit	3.48 g/kg	-
	LD50 Oral	Rat	8400 mg/kg	-
Ethyl Benzene	LC50 Inhalation Vapor	Rat	17.8 mg/l	4 hours
	LD50 Dermal	Rabbit	17.8 g/kg	-
	LD50 Oral	Rat	3.5 g/kg	-
1,2,4-Trimethylbenzene	LC50 Inhalation Vapor	Rat	18000 mg/m ³	4 hours
	LD50 Oral	Rat	5 g/kg	-
Titanium dioxide (excluding nanoparticle)	LC50 Inhalation Dusts and mists	Rat	>6.82 mg/l	4 hours
	LD50 Dermal	Rabbit	>5000 mg/kg	-
	LD50 Oral	Rat	>5000 mg/kg	-
Propylene glycol monomethyl ether acetate	LC50 Inhalation Vapor	Rat	30 mg/l	4 hours
	LD50 Dermal	Rabbit	>5 g/kg	-
	LD50 Oral	Rat	6190 mg/kg	-
Amorphous silica (silica gel, precipitated silica)	LD50 Dermal	Rabbit	>5000 mg/kg	-
	LD50 Oral	Rat	>5000 mg/kg	-
carbon black	LD50 Oral	Rat	>10 g/kg	-
bis(1,2,2,6,6-pentamethyl-	LD50 Oral	Rat	3.125 g/kg	-
4-piperidyl) sebacate				
Cumene	LC50 Inhalation Vapor	Rat	39000 mg/m³	4 hours
	LD50 Dermal	Rabbit	12.3 g/kg	-
	LD50 Oral	Rat	2260 mg/kg	-

Irritation/Corrosion

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

Sensitization

Not available.

Mutagenicity

11. Toxicological information

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
X ylene	Category 1	-	central nervous system (CNS), kidneys, liver, respiratory organs
	Category 3		Narcotic effects
Talc (containing no asbestos or quartz)	Category 1	-	respiratory organs
Solvent naphtha (petroleum), light aromatic	Category 3	-	Narcotic effects
Ethyl Benzene	Category 3	-	Respiratory tract irritation
	Category 3		Narcotic effects
1,2,4-Trimethylbenzene	Category 3	-	Respiratory tract irritation
	Category 3		Narcotic effects
Propylene glycol monomethyl ether acetate	Category 3	-	Respiratory tract irritation
	Category 3		Narcotic effects
Amorphous silica (silica gel, precipitated silica)	Category 3	-	Respiratory tract irritation
Cumene	Category 1	-	nervous system
	Category 3		Respiratory tract irritation
	Category 3		Narcotic effects

Specific target organ toxicity (repeated exposure)

Name	Category	Route of exposure	Target organs
2-Propenoic acid, homopolymer	Category 1	-	respiratory organs
Xylene	Category 1	-	nervous system, respiratory organs
Talc (containing no asbestos or quartz)	Category 1	-	respiratory organs
barium sulfate	Category 1	-	respiratory organs
Ethyl Benzene	Category 1	-	hearing organs, nervous system
1,2,4-Trimethylbenzene	Category 1	-	central nervous system (CNS), respiratory organs
Titanium dioxide (excluding nanoparticle)	Category 1	-	respiratory organs
carbon black Cumene	Category 1 Category 2	-	respiratory organs respiratory organs

Aspiration hazard

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11. Toxicological information

Name	Result
X ylene	ASPIRATION HAZARD - Category 1
Solvent naphtha (petroleum), light aromatic	ASPIRATION HAZARD - Category 1
Ethyl Benzene	ASPIRATION HAZARD - Category 1
1,2,4-Trimethylbenzene	ASPIRATION HAZARD - Category 1
Cumene	ASPIRATION HAZARD - Category 1

Information on the likely routes of exposure	:	Not available.
Potential acute health effect	S	
Eye contact	1	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.
Ingestion	:	Causes damage to organs following a single exposure if swallowed. Can cause central nervous system (CNS) depression.

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: 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
Delayed and immediate effect	<u>cts</u>	and also chronic effects from short and long term exposure
Short term exposure		
Potential immediate effects	:	Not available.
Potential delayed effects	1	Not available.
Long term exposure		
Potential immediate effects	:	Not available.

11. Toxicological information

Potential delayed effects	1	Not available.
Potential chronic health eff	ect	<u>5</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.
Carcinogenicity	:	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)
GMADUR 520 MAT BASE RAL 7012	N/A	3346.7	N/A	51.9	N/A
2-Propenoic acid, homopolymer	2500	3000	N/A	N/A	N/A
Xylene	4300	1700	N/A	11	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
Ethyl Benzene	3500	17800	N/A	17.8	N/A
1,2,4-Trimethylbenzene	5000	N/A	N/A	18	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
Cumene	2260	12300	N/A	11	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.

12. Ecological information

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Product/ingredient name	Result	Species	Exposure
Solvent naphtha (petroleum), light aromatic	Acute LC50 8.2 mg/l	Fish	96 hours
Ethyl Benzene	Acute EC50 1.8 mg/l Fresh water Chronic NOEC 1 mg/l Fresh water	Daphnia Daphnia - <i>Ceriodaphnia dubia</i>	48 hours -
Titanium dioxide (excluding nanoparticle)	Acute LC50 >100 mg/l Fresh water	Daphnia - <i>Daphnia magna</i>	48 hours
Propylene glycol monomethyl ether acetate	Acute LC50 134 mg/l Fresh water	Fish - Oncorhynchus mykiss	96 hours
Amorphous silica (silica gel, precipitated silica)	NOEC >1000 ppm	Daphnia - <i>Daphnia magna</i>	24 hours
	Acute NOEC >10000 ppm Fresh water	Fish	96 hours Static
	Acute NOEC >10000 ppm	Fish - <i>Brachydanio rerio</i>	4 days Static

Persistence/degradability

Product name SIGMADUR 520 MAT BASE RAL 7012

12. Ecological information

Product/ingredient name	Test	Result		Dose		Inoculum
Ethyl Benzene Propylene glycol monomethyl ether acetate	-		dily - 10 days dily - 28 days	-		-
Product/ingredient name	Aquatic half-life		Photolysis		Biodeg	gradability
▼ylene Ethyl Benzene Propylene glycol monomethyl ether acetate Amorphous silica (silica gel, precipitated silica)	- - -				Readily Readily Readily Not rea	

Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
Xylene	3.12	7.4 to 18.5	Low
Ethyl Benzene	3.6	79.43	Low
1,2,4-Trimethylbenzene	3.63	120.23	Low
Propylene glycol monomethyl ether acetate	1.2	-	Low
Amorphous silica (silica gel, precipitated silica)	-	0	Low
Cumene	3.55	35.48	Low

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

: No known significant effects or critical hazards.

13. Disposal considerations

Disposal methods

Other adverse effects

The generation of waste should be avoided or minimized wherever possible. 2 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: None identified.IMDG: None identified.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

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			
Polymer of acrylic acid	23	Class 1	565
Xylene Trimethylbenzene	15 6.2	Class 1 Class 1	80 691
Ethylbenzene	5.1	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	≤10	Special Organic Solvents	3-3

Substance(s) requiring labelling

Product name SIGMADUR 520 MAT BASE RAL 7012

15. Regulatory information

Ingredient name	%	Status	Reference number
X ylene	≥10 - ≤20	Listed	136
Petroleum naphtha	≤10	Listed	330
Trimethylbenzene	≤10	Listed	404
Ethylbenzene	≤10	Listed	70
Titanium(IV) oxide	≤10	Listed	191

Chemicals requiring notification

Ingredient name	%	Status	Reference number
X ylene	≥10 - ≤20	Listed	136
Petroleum naphtha	≤10	Listed	330
Trimethylbenzene	≤10	Listed	404
Ethylbenzene	≤10	Listed	70
Titanium(IV) oxide	≤10	Listed	191
Carbon black	≤10	Listed	130
Cumene	≤10	Listed	138

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, Combustible		
Regulations on the Prevention of Tetraalkyl Lead Poisoning	: Not listed		
Harmful Substances Subject to Obtaining Permission for Manufacturing	: Not listed		
Harmful Substances, Prohibited for Manufacturing	: Not listed		
ISHL Enforcement Order Appendix 1 - Dangerous Substances	: Inflammable, Combustible		
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)

Product name SIGMADUR 520 MAT BASE RAL 7012

15. Regulatory information

Ingredient name	%	Status	Reference number
Polymer of acrylic acid	≥20 - ≤30	Priority assessment	234
Xylene	≥10 - ≤20	Priority assessment	125
Ethylbenzene	≤10	Priority assessment	50
1,2,4-Trimethylbenzene	≤10	Priority assessment	49
1,3,5-Trimethylbenzene	≤10	Priority assessment	201
Cumene	≤10	Priority assessment	126
Toluene	≤10	Priority assessment	46
Benzene	≤10	Priority assessment	45
Naphthalene	≤10	Priority assessment	76
2,2,4,4,6,6,8,8-Octamethyl-	≤10	Monitoring	40
1,3,5,7,2,4,6,8-tetraoxatetrasilocane		_	
2,6-Di-tert-butyl-4-methylphenol	≤10	Priority assessment	64
Acetaldehyde	≤10	Priority assessment	26
Formaldehyde	≤10	Priority assessment	25
Ethylene oxide	≤10	Priority assessment	19
1,4-Dioxane	≤10	Priority assessment	80
Chloromethane	≤10	Priority assessment	6
1-Butanol	≤10	Priority assessment	124

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 2B
List of Specially Controlled Industrial Waste	: Not listed
Japan inventory	: 🕅 components are listed or exempted.
Road law	: Not available.

16. Other information

<u>History</u>	
Date of issue/Date of revision	: 16 January 2025
Date of previous issue	: 3/4/2024
Version	: 2
Prepared by	: EHS

16. Other information

Good	: 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
	hat has shanged from providually issued version

V 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.