SAFETY DATA SHEET



Date of issue 1/10/2022 (month/day/year)

Version 10

Section 1. Chemical product and company identification

A. Product name : SIGMACOVER 456 BASE RAL 9002

Product code : 00150094

B. 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: Product is not intended, labelled or packaged for consumer use.

C. Supplier's or Importer's

information

Email Address

: PPG SSC (680-090)

19, Yeocheon-ro 217beon-gil, Nam-gu,

Ulsan, Korea

Tel: +82-52-210-8222 Korea.MSDS@PPG.COM

Emergency telephone

number:

: +82-52-210-8222

Section 2. Hazards identification

A. Hazard classification : FLAMMABLE LIQUIDS - Category 3

SKIN IRRITATION - Category 2 EYE IRRITATION - Category 2A SKIN SENSITIZATION - Category 1 CARCINOGENICITY - Category 1A

SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 1

AQUATIC HAZARD (LONG-TERM) - Category 2

This product is classified in accordance with the Industrial Safety and Health Act and the Chemical Control Act.

B. GHS label elements, including precautionary statements

Symbol :









Signal word : Danger

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Product name SIGMACOVER 456 BASE RAL 9002

Section 2. Hazards identification

Hazard statements : ► 226 - Flammable liquid and vapor.

H315 - Causes skin irritation.

H317 - May cause an allergic skin reaction.

H319 - Causes serious eye irritation.

H350 - May cause cancer.

H372 - Causes damage to organs through prolonged or repeated exposure. (central

nervous system (CNS), kidneys, liver)

H411 - Toxic to aquatic life with long lasting effects.

Precautionary statements

Prevention

: P202 - Do not handle until all safety precautions have been read and understood.

P280 - Wear protective gloves, protective clothing and eye or face protection.

P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition

sources. No smoking.

P241 - Use explosion-proof electrical, ventilating or lighting equipment.

P242 - Use non-sparking tools.

P243 - Take action to prevent static discharges.

P273 - Avoid release to the environment.

P260 - Do not breathe vapor.

P270 - Do not eat, drink or smoke when using this product.

P264 - Wash thoroughly after handling.

Response : P391 - Collect spillage.

P308 + P313 - IF exposed or concerned: Get medical advice or attention. P362 + P364 - Take off contaminated clothing and wash it before reuse.

P302 + P352 - IF ON SKIN: Wash with plenty of water.

P333 + P313 - If skin irritation or rash occurs: Get medical advice or attention. P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue rinsing. P337 + P313 - If eye irritation persists: Get medical advice or attention.

Storage : \$\overline{\pi}403 + P235 - Store in a well-ventilated place. Keep cool.

Disposal : P501 - Dispose of contents and container in accordance with all local, regional,

national and international regulations.

C. Other hazards which do

not result in classification

: Prolonged or repeated contact may dry skin and cause irritation.

Section 3. Composition/information on ingredients

CAS number/other identifiers

CAS number : Not applicable.

Chemical name	Common name	Identifiers	%
#,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with fatty acids, C18-unsatd., dimers	EPOXY RESIN	CAS: 67989-52-0	30 - <40
crystalline silica, respirable powder (>10 microns)	QUARTZ (>10 microns)	CAS: 14808-60-7	20 - <30
titanium dioxide Xylene Talc , not containing asbestiform fibres ethylbenzene	TITANIUM DIOXIDE XYLENES Talc, non-asbestos form ETHYLBENZENE	CAS: 13463-67-7 CAS: 1330-20-7 CAS: 14807-96-6 CAS: 100-41-4	10 -<20 10 -<20 10 -<20 5 - <10

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Product code 00150094 Date of issue 1/10/2022 (month/day/year) Version 10 Product name SIGMACOVER 456 BASE RAL 9002						
Section 3. Composition/information on ingredients						
2-methylpropan-1-ol propylidynetrimethanol	ISOBUTYL ALCOHOL TRIMETHYLOLPROPANE	CAS: 78-83-1 CAS: 77-99-6	1 - <5 0.1 - <1			

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.

Section	4	First	aid	measures
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A. 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.

B. 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.

C. 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.

D. Ingestion	: If swallowed, seek medical advice immediately and show this container or label.
	Keep person warm and at rest. Do NOT induce vomiting.

- E. Notes to physician : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
 - Specific treatments
 No specific treatment.
 Protection of first-aiders
 No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

A. Extinguishing media

Suitable extinguishing

media

Unsuitable extinguishing media

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

: Do not use water jet.

B. Specific hazards arising from the chemical

: Fammable 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

halogenated compounds metal oxide/oxides

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Product name SIGMACOVER 456 BASE RAL 9002

Section 5. Fire-fighting measures

C. Special equipment for fire-fighting

Product code 00150094

- : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
- Fire-fighting procedures :
- 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 6. Accidental release measures

- A. Personal precautions, protective equipment and emergency procedures
- : 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.
- B. 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.
- C. Methods and materials for containment and cleaning up

Small spill

: Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

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

- A. Precautions for safe handling
- : Put on appropriate personal protective equipment (see Section 8). Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Avoid exposure obtain special instructions before use. 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

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Section 7. Handling and storage

hazardous. Do not reuse container.

B. 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

A. Occupational exposure limits

Ingredient name	Exposure limits
rystalline silica, respirable powder (>10 microns)	Ministry of Employment and Labor (Republic of Korea, 1/2020). TWA: 0.05 mg/m³ 8 hours. Form:
	Respirable fraction
titanium dioxide	Ministry of Employment and Labor
	(Republic of Korea, 1/2020). TWA: 10 mg/m³ 8 hours. Form: total dust with less than 1% of free SiO2
Xylene	Ministry of Employment and Labor
	(Republic of Korea, 1/2020).
	STEL: 150 ppm 15 minutes. TWA: 100 ppm 8 hours.
Talc , not containing asbestiform fibres	Ministry of Employment and Labor
	(Republic of Korea, 1/2020). TWA: 2 mg/m³ 8 hours. Form: fibers
ethylbenzene	Ministry of Employment and Labor
	(Republic of Korea, 1/2020).
	STEL: 125 ppm 15 minutes.
O mostly down on A of	TWA: 100 ppm 8 hours.
2-methylpropan-1-ol	Ministry of Employment and Labor (Republic of Korea, 1/2020).
	TWA: 50 ppm 8 hours.

Recommended monitoring procedures

- : If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to appropriate monitoring standards. Reference to national guidance documents for methods for the determination of hazardous substances will also be required.
- B. 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.

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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.

C. Personal protective equipment

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.

Eye protection Hand protection

: Chemical splash goggles.

: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

Gloves

: butyl rubber

Body protection

Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves.

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.

Section 9. Physical and chemical properties

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

A. Appearance

Physical state : Liquid.

Color : White.

B. Odor : Aromatic.

C. Odor threshold : Not available.

D. pH : Not applicable.

E. Melting/freezing point : Not available.

F. Boiling point/boiling : >37.78°C (>100°F)

range

G. Flash point : Closed cup: 26°C (78.8°F)

H. Evaporation rate : Not available.I. Flammability (solid, gas) : Not available.

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Section 9. Physical and chemical properties

J. Lower and upper explosive (flammable)

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

K. Vapor pressure

limits

	Vapor Pressure at 20°C			Vapor pressure at 50°C		
Ingredient name	mm Hg	kPa	Method	mm Hg	kPa	Method
2-methylpropan-1-ol	<12	<1.6	DIN EN 13016-2			

L. Solubility : Insoluble in the following materials: cold water.

Solubility in water : Not available. M. Vapor density : Not available.

: 1.44 N. Relative density

O. Partition coefficient: noctanol/water

: Not applicable.

P. Auto-ignition

temperature

Ingredient name	°C	°F	Method
2-methylpropan-1-ol	415	779	

Q. Decomposition

temperature

: Not available.

R. Viscosity : Kinematic (40°C (104°F)): >21 mm²/s (>21 cSt)

Flow time (ISO 2431) : Not available. S. Molecular weight : Not applicable.

Section 10. Stability and reactivity

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A. Chemical stability : The product is stable.

Possibility of hazardous reactions

: Under normal conditions of storage and use, hazardous reactions will not occur.

B. Conditions to avoid

: When exposed to high temperatures may produce hazardous decomposition products.

C. Incompatible materials

: Keep away from the following materials to prevent strong exothermic reactions: oxidizing agents, strong alkalis, strong acids.

D. Hazardous decomposition products : Depending on conditions, decomposition products may include the following materials: carbon oxides halogenated compounds metal oxide/oxides

Section 11. Toxicological information

A. Information on the likely routes of exposure

: Not available.

Potential acute health effects

: No known significant effects or critical hazards. Inhalation : No known significant effects or critical hazards. Ingestion

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

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Section 11. Toxicological information

Eye contact : Causes serious eye irritation.

Over-exposure signs/symptoms

Inhalation: No specific data.Ingestion: No specific data.

Skin contact: Adverse symptoms may include the following:

irritation redness dryness cracking

Eye contact : Adverse symptoms may include the following:

pain or irritation

watering redness

B. Health hazards

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
tranium dioxide	LC50 Inhalation Dusts and mists	Rat	>6.82 mg/l	4 hours
	LD50 Dermal	Rabbit	>5000 mg/kg	-
	LD50 Oral	Rat	>5000 mg/kg	-
Xylene	LD50 Dermal	Rabbit	1.7 g/kg	-
	LD50 Oral	Rat	4.3 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	-
2-methylpropan-1-ol	LC50 Inhalation Vapor	Rat	24.6 mg/l	4 hours
	LD50 Dermal	Rabbit	2460 mg/kg	_
	LD50 Oral	Rat	2830 mg/kg	_
propylidynetrimethanol	LD50 Dermal	Rabbit	10 g/kg	_
	LD50 Oral	Rat	14000 mg/kg	-

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

Irritation/Corrosion

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

Conclusion/Summary

Skin: There are no data available on the mixture itself.Eyes: There are no data available on the mixture itself.Respiratory: There are no data available on the mixture itself.

Sensitization

Conclusion/Summary

Skin : There are no data available on the mixture itself.Respiratory : There are no data available on the mixture itself.

Mutagenicity

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

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Section 11. Toxicological information

Carcinogenicity

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

Reproductive toxicity

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

Teratogenicity

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

Specific target organ toxicity (single exposure)

Name	Classification	Route of exposure	Target organs
▼ylene Talc , not containing asbestiform fibres	Category 3 Category 3	-	Narcotic effects Respiratory tract irritation
2-methylpropan-1-ol	Category 3 Category 3	-	Respiratory tract irritation Narcotic effects

Specific target organ toxicity (repeated exposure)

Name	Classification	Route of exposure	Target organs
Xylene	Category 1		central nervous system (CNS), kidneys, liver

Aspiration hazard

Name	Result
ethylbenzene	ASPIRATION HAZARD - Category 1
2-methylpropan-1-ol	ASPIRATION HAZARD - Category 2

Potential chronic health effects

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: May cause cancer. Risk of cancer depends on duration and level of exposure.

Mutagenicity : No known significant effects or critical hazards.Reproductive toxicity : No known significant effects or critical hazards.

Additional 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.

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Product name SIGMACOVER 456 BASE RAL 9002

Section 11. Toxicological information

Chemical name	Identifiers	GHS Classification
#,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with fatty acids, C18-unsatd., dimers	CAS: 67989-52-0	SKIN IRRITATION - Category 2
		EYE IRRITATION - Category 2A SKIN SENSITIZATION - Category 1B AQUATIC HAZARD (LONG-TERM) - Category 2
crystalline silica, respirable powder (>10 microns)	CAS: 14808-60-7	CARCINOGENICITY - Category 1A
titanium dioxide Xylene	CAS: 13463-67-7 CAS: 1330-20-7	CARCINOGENICITY - Category 2 FLAMMABLE LIQUIDS - Category 3 ACUTE TOXICITY (dermal) - Category 4 ACUTE TOXICITY (inhalation) - Category 4 SKIN IRRITATION - Category 2 EYE IRRITATION - Category 2A SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3 SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 1
Talc , not containing asbestiform fibres	CAS: 14807-96-6	SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3
ethylbenzene	CAS: 100-41-4	FLAMMABLE LIQUIDS - Category 2 ACUTE TOXICITY (inhalation) - Category 4 CARCINOGENICITY - Category 2 ASPIRATION HAZARD - Category 1 AQUATIC HAZARD (LONG-TERM) - Category 3
2-methylpropan-1-ol	CAS: 78-83-1	FLAMMABLE LIQUIDS - Category 3 SKIN IRRITATION - Category 2 SERIOUS EYE DAMAGE - Category 1 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3 ASPIRATION HAZARD - Category 2
propylidynetrimethanol	CAS: 77-99-6	TOXIC TO REPRODUCTION - Category 2

Section 12. Ecological information

A. Ecotoxicity

Product/ingredient name	Result	Species	Exposure
titanium dioxide	Acute LC50 >100 mg/l Fresh water	Daphnia - Daphnia magna	48 hours
ethylbenzene	Acute EC50 1.8 mg/l Fresh water	Daphnia	48 hours
_	Chronic NOEC 1 mg/l Fresh water	Daphnia - Ceriodaphnia dubia	-
2-methylpropan-1-ol	Acute EC50 1100 mg/l	Daphnia	48 hours
propylidynetrimethanol	Acute LC50 >1000 mg/l	Fish	96 hours

B. Persistence and degradability

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Section 12. Ecological information

Product/ingredient name	Test	Result	Dose	Inoculum
e thylbenzene	-	79 % - Readily - 10 days	-	-

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
X ylene	-	-	Readily
ethylbenzene	-	-	Readily

C. Bioaccumulative potential

Product/ingredient name	LogP _{ow}	BCF	Potential
	3.12	7.4 to 18.5	low
ethylbenzene	3.6	79.43	low
2-methylpropan-1-ol	1	-	low
propylidynetrimethanol	-0.47	-	low

D. Mobility in soil

Soil/water partition coefficient (Koc)

: Not available.

E. Other adverse effects

: No known significant effects or critical hazards.

Section 13. Disposal considerations

A. 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.

B. Disposal precautions

: This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapor from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

	UN	IMDG	IATA
A. UN number	UN1263	UN1263	UN1263
B. UN proper shipping name	PAINT	PAINT	PAINT
C. Transport hazard class(es)	3	3	3
D. Packing group	III	III	III

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Section 14 Transport information	n .	
Product name SIGMACOVER 456 BASE RAL 9002		
Product code 00150094	Date of issue 1/10/2022 (month/day/year)	Version 10

Environmental hazards	Yes. The environmentally hazardous substance mark is not required.	Yes.	Yes. The environmentally hazardous substance mark is not required.
E. Marine pollutant substances	Not applicable.	(4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with fatty acids, C18-unsatd., dimers)	Not applicable.

Additional information

UN : None identified.

: The marine pollutant mark is not required when transported in sizes of ≤5 L or ≤5 kg. **IMDG**

: The environmentally hazardous substance mark may appear if required by other transportation **IATA**

regulations.

F. Special precaution which a user to be aware of or needs to comply with in connection with transport or tranportation

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

A. Regulation according to ISHA

ISHA article 117 (Harmful substances prohibited from manufacture)

: None of the components are listed.

: None of the components are listed.

ISHA article 118 (Harmful substances

requiring permission)

Article 2 of Youth Protection Act on Substances Hazardous to Youth

: It is not allowed to sell to persons under the age of 19.

Exposure Limits of Chemical Substances and Physical Factors

The following components have an OEL:

crystalline silica, respirable powder (>10 microns)

titanium dioxide

Xylene

Talc, not containing asbestiform fibres

ethylbenzene

2-methylpropan-1-ol

ISHA Enforcement Regs: None of the components are listed.

Annex 19 (Exposure standards established for harmful factors)

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Product name SIGMACOVER 456 BASE RAL 9002

Section 15. Regulatory information

ISHA Enforcement Regs Annex 21 (Harmful factors subject to Work

The following components are listed: quartz, titanium dioxide, xylene, talc / soapstone, ethyl benzene, isobutyl alcohol

Environment Measurement)

Annex 22 (Harmful Factors Subject to Special Health Checkup)

ISHA Enforcement Regs : The following components are listed: Xylene, Ethyl benzene, Isobutyl alcohol

Standard of Industrial Safety and Health

Annex 12 (Hazardous substances subject to control)

: The following components are listed: titanium dioxide, xylene, ethyl benzene, isobutyl alcohol

B. Regulation according to Chemicals Control Act

CCA Article 11 (TRI)

: The following components are listed: Xylene including o-,m-,p- isomer, Ethylbenzene : None of the components are listed.

Article 18 Prohibited (K-

Reach Article 27)

Article 19 Subject to authorization (K-Reach

Article 25)

Article 20 Restricted (K-

Reach Article 27)

: None of the components are listed.

: None of the components are listed.

Article 20 Toxic

Chemicals (K-Reach

Article 20)

: Not applicable

Korea inventory CCA Article 39

(Accident Precaution

Chemicals)

: All components are listed or exempted. : None of the components are listed.

C. Dangerous Materials

Safety Management Act

: Class: Class 4 - Flammable Liquid

Item: 4. Class 2 petroleums - Water-insoluble liquid

Threshold: 1000 L Danger category: III

Signal word: Contact with sources of ignition prohibited

D. Wastes regulation : Dispose of contents and container in accordance with all local, regional, national

E. Regulation according to other foreign laws

Safety, health and environmental

regulations specific for

the product

: No known specific national and/or regional regulations applicable to this product

(including its ingredients).

and international regulations.

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Product name SIGMACOVER 456 BASE RAL 9002

Section 16. Other information

A. References : Korean Ministry of Environment; Chemical Control Act

Korean Ministry of Labor; Industrial Safety and Health Act

NIER Notice

Registry of Toxic Effects of Chemical Substances (RTECS)

U.S. Environmental Protection Agency, AQUIRE (Aquatic toxicity Information

Retrieval) ECOTOX Database System.

B. Date of issue/Date of

revision

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D. Other

▼ Indicates information that has changed from previously issued version.

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