# **SAFETY DATA SHEET**



Date of issue 4/3/2024 (month/day/year)

Version 2

## Section 1. Chemical product and company identification

A. Product name : SIGMARINE 48 BLACK

Product code : 00445373

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:

## Section 2. Hazards identification

A. Hazard classification : FLAMMABLE LIQUIDS - Category 3

CARCINOGENICITY - Category 1B

TOXIC TO REPRODUCTION - Category 1B SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) -

Category 3

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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## Section 2. Hazards identification

**Hazard statements** 

Product code 00445373

: H226 - Flammable liquid and vapor.

H336 - May cause drowsiness or dizziness.

H350 - May cause cancer.

H360 - May damage fertility or the unborn child.

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

nervous system (CNS))

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.

Response : P391 - Collect spillage.

P308 + P313 - IF exposed or concerned: Get medical advice or attention.

P304 + P312 - IF INHALED: Call a POISON CENTER or doctor if you feel unwell.

: P403 + P233 - Store in a well-ventilated place. Keep container tightly closed. **Storage** 

P403 + P235 - Keep cool.

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

national and international regulations.

not result in classification

**C.** Other hazards which do : 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	%
Maphtha (petroleum), hydrodesulfurized	NAPHTHA(PETROLEUM),	CAS: 64742-82-1	40 -
heavy	HYDRODESULFURIZED HEAVY		<50
Talc , not containing asbestiform fibres	Talc, non-asbestos form	CAS: 14807-96-6	1 - <5
carbon black	CARBON BLACK	CAS: 1333-86-4	1 - <5
Solvent naphtha (petroleum), light	SOLVENT NAPHTHA (PETROLEUM),	CAS: 64742-95-6	1 - <5
aromatic	LIGHT AROMATIC		
2-ethylhexanoic acid, zirconium salt	ZIRCONIUM 2-ETHYLHEXANOATE	CAS: 22464-99-9	0.1 - <1
ethanol	ETHYL ALCOHOL	CAS: 64-17-5	0.1 - <1
calcium bis(2-ethylhexanoate)	2-ETHYL-HEXANOIC ACID;CALCIUM	CAS: 136-51-6	0.1 - <1
	SALT		
2-ethylhexanoic acid cobalt(2+) salt	COBALT OCTOATE	CAS: 136-52-7	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.

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## Section 3. Composition/information on ingredients

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

### Section 4. First aid measures

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.

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

: Treat symptomatically. Contact poison treatment specialist immediately if large E. Notes to physician 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, CO<sub>2</sub>, water spray (fog) or foam.

: Do not use water jet.

B. 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

metal oxide/oxides

C. Special equipment for fire-fighting

: 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.

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

## Section 7. Handling and storage

- A. Precautions for safe 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.

Materials such as cleaning rags, paper wipes and protective clothing, which are contaminated with the product may spontaneously self-ignite some hours later. To avoid the risks of fires, all contaminated materials should be stored in purpose-built containers or in metal containers with tight-fitting, self-closing lids. Contaminated materials should be removed from the workplace at the end of each working day and be stored outside.

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## Section 7. Handling and storage

B. Conditions for safe storage, including any incompatibilities

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: 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
▼alc , not containing asbestiform fibres	Ministry of Employment and Labor
	(Republic of Korea, 1/2020).
	TWA: 2 mg/m³ 8 hours. Form: fibers
carbon black	Ministry of Employment and Labor
	(Republic of Korea, 1/2020).
	TWA: 3.5 mg/m³ 8 hours. Form: inhalable
	fraction
2-ethylhexanoic acid, zirconium salt	Ministry of Employment and Labor
	(Republic of Korea, 1/2020). [Zirconium
	and compounds as Zr]
	STEL: 10 mg/m³, (as Zr) 15 minutes.
	TWA: 5 mg/m³, (as Zr) 8 hours.
ethanol	Ministry of Employment and Labor
	(Republic of Korea, 1/2020).
	TWA: 1000 ppm 8 hours.
2-ethylhexanoic acid cobalt(2+) salt	Ministry of Employment and Labor
	(Republic of Korea, 1/2020). [Cobalt and
	inorganic compounds]
	TWA: 0.02 mg/m <sup>3</sup> 8 hours.

Recommended monitoring procedures

- Reference should be made to appropriate monitoring standards. Reference to national guidance documents for methods for the determination of hazardous substances will also be required.
- 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.

**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

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## Section 8. Exposure controls/personal protection

**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** 

: Safety glasses with side shields.

**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

: butvl 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. 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 : Black.

: Characteristic. B. Odor 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

: Closed cup: 42°C (107.6°F) G. Flash point

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

J. Lower and upper explosive (flammable)

limits

: Greatest known range: Lower: 1.4% Upper: 7.6% (Naphtha (petroleum),

hydrodesulfurized heavy)

K. Vapor pressure

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## Section 9. Physical and chemical properties

	Vapor Pressure at 20°C		Vapor pressure at 50°C		re at 50°C	
Ingredient name	mm Hg	kPa	Method	mm Hg	kPa	Method
Maphtha (petroleum), hydrodesulfurized heavy	3.7503075	0.5				

Media Result L. Solubility(ies)

cold water Not soluble

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

**Relative density** 0.95

Partition coefficient: n-

octanol/water

**Auto-ignition** temperature

: Not applicable.

°C Ingredient name °F Method Naphtha (petroleum), 280 to 470 536 to 878 hydrodesulfurized heavy

**Decomposition** 

temperature

S.

: Not available.

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

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

# Section 10. Stability and reactivity

A. Chemical stability

reactions

: The product is stable.

Possibility of hazardous: 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 metal oxide/oxides

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## **Section 11. Toxicological information**

A. Information on the likely routes of exposure

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: Not available.

#### Potential acute health effects

Inhalation : Can cause central nervous system (CNS) depression. May cause drowsiness or

dizziness.

Ingestion : Can cause central nervous system (CNS) depression.Skin contact : Defatting to the skin. May cause skin dryness and irritation.

**Eye contact**: No known significant effects or critical hazards.

#### Over-exposure signs/symptoms

**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

**Ingestion** : Adverse symptoms may include the following:

reduced fetal weight increase in fetal deaths skeletal malformations

**Skin contact**: Adverse symptoms may include the following:

irritation dryness cracking

reduced fetal weight increase in fetal deaths skeletal malformations

Eye contact : No specific data.

#### B. Health hazards

#### **Acute toxicity**

Product/ingredient name	Result	Species	Dose	Exposure
Maphtha (petroleum), hydrodesulfurized heavy	LD50 Oral	Rat	>5000 mg/kg	-
carbon black	LD50 Oral	Rat	>10 g/kg	-
Solvent naphtha (petroleum), light aromatic	LD50 Dermal	Rabbit	3.48 g/kg	-
	LD50 Oral	Rat	8400 mg/kg	-
2-ethylhexanoic acid, zirconium salt	LD50 Dermal	Rabbit	>5 g/kg	-
	LD50 Oral	Rat	>5 g/kg	=
ethanol	LC50 Inhalation Vapor	Rat	124700 mg/m <sup>3</sup>	4 hours
	LD50 Dermal	Rat	17100 mg/kg	=
	LD50 Oral	Rat	7 g/kg	-
2-ethylhexanoic acid cobalt(2+) salt	LD50 Dermal	Rabbit	>5 g/kg	-
	LD50 Oral	Rat	3129 mg/kg	-

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

#### **Irritation/Corrosion**

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# **Section 11. Toxicological information**

**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.

**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
Maphtha (petroleum), hydrodesulfurized heavy Talc , not containing asbestiform fibres	Category 3 Category 3		Narcotic effects Respiratory tract irritation
Solvent naphtha (petroleum), light aromatic	Category 3	-	Narcotic effects

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

Name	Classification	Route of exposure	Target organs
Naphtha (petroleum), hydrodesulfurized heavy	Category 1		central nervous system (CNS)

#### **Aspiration hazard**

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

#### 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.

**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.

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# Section 11. Toxicological information

### **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.

Chemical name	Identifiers	GHS Classification
Maphtha (petroleum), hydrodesulfurized heavy	CAS: 64742-82-1	FLAMMABLE LIQUIDS - Category 4
,		SPECIFIC TARGET ORGAN TOXICITY (SINGLE
		EXPOSURE) (Narcotic effects) - Category 3
		SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 1
		ASPIRATION HAZARD - Category 1
		AQUATIC HAZARD (LONG-TERM) - Category 2
Talc , not containing asbestiform fibres	CAS: 14807-96-6	SPECIFIC TARGET ORGAN TOXICITY (SINGLE
		EXPOSURE) (Respiratory tract irritation) -
a a wha a la h la a la	CAC: 4222 06 4	Category 3
carbon black Solvent naphtha (petroleum), light	CAS: 1333-86-4 CAS: 64742-95-6	CARCINOGENICITY - Category 2 FLAMMABLE LIQUIDS - Category 3
aromatic	OAO. 04742-33-0	T EXIMINABLE EIGOIDO - Galegory o
		SKIN IRRITATION - Category 2
		SPECIFIC TARGET ORGAN TOXICITY (SINGLE
		EXPOSURE) (Narcotic effects) - Category 3
		ASPIRATION HAZARD - Category 1 AQUATIC HAZARD (LONG-TERM) - Category 2
2-ethylhexanoic acid, zirconium salt	CAS: 22464-99-9	TOXIC TO REPRODUCTION - Category 1B
ethanol	CAS: 64-17-5	FLAMMABLE LIQUIDS - Category 2
		EYE IRRITATION - Category 2A
adaine his/2 athrills aven acts)	CAS: 136-51-6	CARCINOGENICITY - Category 2
calcium bis(2-ethylhexanoate)	CAS: 130-51-0	SERIOUS EYE DAMAGE - Category 1 TOXIC TO REPRODUCTION - Category 1B
2-ethylhexanoic acid cobalt(2+) salt	CAS: 136-52-7	SKIN IRRITATION - Category 2
		RESPIRATORY SENSITIZATION - Category 1
		SKIN SENSITIZATION - Category 1
		GERM CELL MUTAGENICITY - Category 2
		CARCINOGENICITY - Category 1B TOXIC TO REPRODUCTION - Category 1B
		AQUATIC HAZARD (ACUTE) - Category 1
		AQUATIC HAZARD (LONG-TERM) - Category 1

# Section 12. Ecological information

#### A. **Ecotoxicity**

	1		
Product/ingredient name	Result	Species	Exposure
Solvent naphtha (petroleum), light aromatic	Acute LC50 8.2 mg/l	Fish	96 hours
2-ethylhexanoic acid, zirconium salt	Acute LC50 >100 mg/l	Fish	96 hours
ethanol	Acute EC50 7640 mg/l Fresh water	Daphnia - <i>Daphnia magna</i>	48 hours

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## **Section 12. Ecological information**

#### B. Persistence and degradability

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
<b>e</b> thanol	-	-	Readily

#### C. Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
<b>e</b> thanol	-0.35	-	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
Environmental hazards	Yes. The environmentally hazardous substance mark is not required.	Yes.	Yes. The environmentally hazardous substance mark is not required.

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Product code 00445373 Date of issue 4/3/2024 (month/day/year) Version 2 **Product name SIGMARINE 48 BLACK Section 14. Transport information** Not applicable. E. Marine Not applicable. (Naphtha (petroleum). pollutant hydrodesulfurized heavy) substances

#### **Additional information**

UN None identified.

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

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

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

: None of the components are listed. **ISHA** article 117

(Harmful substances prohibited from manufacture)

**ISHA** article 118 : None of the components are listed.

(Harmful substances requiring permission)

**Article 2 of Youth Protection** : It is not allowed to sell to persons under the age of 19.

**Act on Substances Hazardous** 

to Youth

#### **Exposure Limits of Chemical Substances and Physical Factors**

The following components have an OEL:

ralc , not containing asbestiform fibres

carbon black

2-ethylhexanoic acid, zirconium salt

ethanol

2-ethylhexanoic acid cobalt(2+) salt

ISHA Enforcement Regs : The following components are listed: cobalt and its inorganic compounds

**Annex 19 (Exposure** standards established for harmful factors)

Annex 21 (Harmful factors subject to Work

**Environment Measurement)** 

ISHA Enforcement Regs : The following components are listed: talc / soapstone

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## **Section 15. Regulatory information**

ISHA Enforcement Regs : None of the components are listed.

Annex 22 (Harmful Factors Subject to Special Health Check-

up)

Standard of Industrial Safety and Health

Annex 12 (Hazardous substances subject to control)

: None of the components are listed.

B. Regulation according to Chemicals Control Act

Article 11 (TRI) : The following components are listed: Cobalt and its compounds

Article 18 Prohibited (K-

Reach Article 27)

: None of the components are listed.

Article 19 Subject to authorization (K-Reach

Article 25)

: None of the components are listed.

: None of the components are listed.

Article 20 Restricted (K-Reach Article 27)

Article 20 Toxic

Chemicals (K-Reach

Article 20)

: Toxic

Korea inventory

Article 39 (Accident

: All components are listed or exempted.

Precaution Chemicals)

: The following components are listed: 2-ethylhexanoic acid cobalt(2+) salt

C. <u>Dangerous Materials</u>

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

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

E. Regulation according to other foreign laws

Safety, health and environmental regulations specific for

: No known specific national and/or regional regulations applicable to this product (including its ingredients).

egulations sp

the product

**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

4/3/2024

C. Version : 2

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### **Section 16. Other information**

Prepared by : EHS

D. Other

**▼** Indicates information that has changed from previously issued version.

#### **Disclaimer**

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