SAFETY DATA SHEET



Date of issue 1/9/2024 (month/day/year)

Version 16.04

Section 1. Chemical product and company identification

A. Product name : SIGMATHERM 350 ALUMINIUM

Product code : 00168790

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 CARCINOGENICITY - Category 2

SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) -

Category 3

SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 1

AQUATIC HAZARD (LONG-TERM) - Category 3

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

Korea (GHS) Page: 1/14

Product name SIGMATHERM 350 ALUMINIUM

Section 2. Hazards identification

Hazard statements : H226 - Flammable liquid and vapor.

H315 - Causes skin irritation.

H319 - Causes serious eye irritation.

H336 - May cause drowsiness or dizziness.

H351 - Suspected of causing cancer.

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

nervous system (CNS), kidneys, liver)

H412 - Harmful 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: 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.

P362 + P364 - Take off contaminated clothing and wash it before reuse.

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

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

P403 + P235 - 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	%
▼ylene	XYLENES	CAS: 1330-20-7	10 -<20
Aluminium powder (stabilized)	ALUMINUM POWDER	CAS: 7429-90-5	10 -<20
ethylbenzene	ETHYLBENZENE	CAS: 100-41-4	10 -<20
Solvent naphtha (petroleum), light	SOLVENT NAPHTHA (PETROLEUM),	CAS: 64742-95-6	5 - <10
aromatic	LIGHT AROMATIC	040 04740 04 5	5 440
Solvent naphtha (petroleum), heavy arom.	SOLVENT NAPHTHA (PETROLEUM), HEAVY AROMATIC	CAS: 64742-94-5	5 - <10
1,2,4-trimethylbenzene	1,2,4-TRIMETHYL BENZENE	CAS: 95-63-6	5 - <10
Talc , not containing asbestiform fibres	Talc, non-asbestos form	CAS: 14807-96-6	1 - <5
cumene	CUMENE	CAS: 98-82-8	0.1 - <1

Korea (GHS) Page: 2/14

Product code 00168790 Product name SIGMATHERM 350 ALU	Date of issue 1/9/2024 (m	nonth/day/year)	Version 16.04
Section 3. Composition/information on ingredients			
zinc bis(2-ethylhexanoate)	zinc bis(2-ethylhexanoate)	CAS: 136-53-8	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. F	First	aid	measures
--	---------	------	-------	-----	----------

_	Fire contact	. Domesta conto

- 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.
- 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.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

A. Extinguishing media

Suitable extinguishing media

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

Unsuitable extinguishing media

: 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 harmful to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.

Hazardous thermal decomposition products

: Decomposition products may include the following materials: carbon oxides

metal oxide/oxides

Korea (GHS) Page: 3/14

Product name SIGMATHERM 350 ALUMINIUM

Section 5. Fire-fighting measures

- 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.

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.
- 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). 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 hazardous. Do not reuse container.

Korea (GHS) Page: 4/14

Date of issue 1/9/2024 (month/day/year) Version 16.04

Product name SIGMATHERM 350 ALUMINIUM

Section 7. Handling and storage

B. Conditions for safe storage, including any incompatibilities

Product code 00168790

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
Kylene	Ministry of Employment and Labor (Republic of Korea, 1/2020). [Xylene (all isomers)] STEL: 150 ppm 15 minutes. TWA: 100 ppm 8 hours.
Aluminium powder (stabilized)	Ministry of Employment and Labor (Republic of Korea, 1/2020). TWA: 10 mg/m³ 8 hours. Form: Dust
ethylbenzene	Ministry of Employment and Labor (Republic of Korea, 1/2020). STEL: 125 ppm 15 minutes. TWA: 100 ppm 8 hours.
1,2,4-trimethylbenzene	Ministry of Employment and Labor (Republic of Korea, 1/2020). [Trimethyl benzene (mixed isomers)] TWA: 25 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
cumene	Ministry of Employment and Labor (Republic of Korea, 1/2020). Absorbed through skin. TWA: 50 ppm 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

Korea (GHS) Page: 5/14

Product name SIGMATHERM 350 ALUMINIUM

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

: Chemical splash goggles.

Hand protection

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

estimated.

Gloves : For prolonged or repeated handling, use the following type of gloves:

Not recommended: nitrile rubber

Recommended: polyvinyl alcohol (PVA), Viton®

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 : 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: 28°C (82.4°F)

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

J. Lower and upper explosive (flammable)

: Greatest known range: Lower: 0.6% Upper: 7% (Solvent naphtha (petroleum),

heavy arom.)

limits

K. Vapor pressure :

Korea (GHS) Page: 6/14

Date of issue 1/9/2024 (month/day/year) Version 16.04

Product name SIGMATHERM 350 ALUMINIUM

Section 9. Physical and chemical properties

Vapor Pressure at 20°C Vapor pressure at 50°C

Ingredient name mm Hg kPa Method mm Hg kPa Method

ethylbenzene 9.30076 1.2

L. Solubility(ies) : Media Result

cold water Not soluble

Solubility in water : Not available.

Vapor density : Not available.

Relative density : 1.04

Partition coefficient: n-

Product code 00168790

octanol/water

Auto-ignition temperature

: Not applicable.

Ingredient name

°C

°F

Method

Solvent naphtha (petroleum), heavy arom.

220 to 250

428 to 482

ASTM E 659

Q. Decomposition temperature

S.

: Not available.

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

Flow time (ISO 2431) : Not available.

Molecular weight : Not applicable.

Section 10. Stability and reactivity

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 metal oxide/oxides

Korea (GHS) Page: 7/14

Product name SIGMATHERM 350 ALUMINIUM

Section 11. Toxicological information

A. Information on the likely routes of exposure

: 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: Causes skin irritation. Defatting to the skin.

Eye contact : Causes serious eye irritation.

Over-exposure signs/symptoms

Inhalation : Adverse symptoms may include the following:

nausea or vomiting

headache

drowsiness/fatigue dizziness/vertigo unconsciousness

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
K ylene	LD50 Dermal	Rabbit	1.7 g/kg	-
	LD50 Oral	Rat	4.3 g/kg	_
Aluminium powder (stabilized)	LC50 Inhalation Dusts and mists	Rat	>5 mg/l	4 hours
	LD50 Oral	Rat	>15900 mg/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	-
Solvent naphtha (petroleum), light aromatic	LD50 Dermal	Rabbit	3.48 g/kg	-
	LD50 Oral	Rat	8400 mg/kg	-
Solvent naphtha (petroleum), heavy	LC50 Inhalation Dusts and	Rat	>5.2 mg/l	4 hours
arom.	mists			
	LD50 Oral	Rat	>5 g/kg	-
1,2,4-trimethylbenzene	LC50 Inhalation Vapor	Rat	18000 mg/m ³	4 hours
•	LD50 Oral	Rat	5 g/kg	_
cumene	LC50 Inhalation Vapor	Rat	39000 mg/m ³	4 hours
	LD50 Dermal	Rabbit	12.3 g/kg	_
	LD50 Oral	Rat	2260 mg/kg	-
zinc bis(2-ethylhexanoate)	LD50 Dermal	Rabbit	>5 g/kg	-
	LD50 Oral	Rat	2043 mg/kg	-

Korea (GHS) Page: 8/14

Product name SIGMATHERM 350 ALUMINIUM

Section 11. Toxicological information

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.

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
Xylene Solvent naphtha (petroleum), light aromatic Solvent naphtha (petroleum), heavy arom. 1,2,4-trimethylbenzene Talc , not containing asbestiform fibres	Category 3 Category 3 Category 3 Category 3 Category 3	- - - -	Narcotic effects Narcotic effects Narcotic effects Respiratory tract irritation Respiratory tract irritation

Specific target organ toxicity (repeated exposure)

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

Aspiration hazard

	Korea (GHS)	Page: 9/14
--	-------------	------------

Product code 00168790	Date of issue 1/9/2024 (month/day/year)	Version 16.04
Product name SIGMATHERM 350 ALUMINIUM		

Section 11. Toxicological information

Name	Result
Solvent naphtha (petroleum), light aromatic	ASPIRATION HAZARD - Category 1 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: Suspected of causing 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.

Chemical name	Identifiers	GHS Classification
▼ylene	CAS: 1330-20-7	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
Aluminium powder (stabilized)	CAS: 7429-90-5	FLAMMABLE SOLIDS - Category 1 SUBSTANCES AND MIXTURES, WHICH IN CONTACT WITH WATER, EMIT FLAMMABLE GASES - Category 2
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
Solvent naphtha (petroleum), light aromatic	CAS: 64742-95-6	FLAMMABLE LIQUIDS - Category 3 SKIN IRRITATION - Category 2 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3 ASPIRATION HAZARD - Category 1 AQUATIC HAZARD (LONG-TERM) - Category 2
Solvent naphtha (petroleum), heavy arom.	CAS: 64742-94-5	FLAMMABLE LIQUIDS - Category 4 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3 ASPIRATION HAZARD - Category 1 AQUATIC HAZARD (LONG-TERM) - Category 2

Korea (GHS) Page: 10/14

Product code 00168790	Date of issue 1/9/2024 (month/day/year)	Version 16.04
Product name SIGMATHERM 350 ALUMINIUM		

Section 11. Toxicological information

1,2,4-trimethylbenzene	CAS: 95-63-6	FLAMMABLE LIQUIDS - Category 3
		ACUTE TOXICITY (inhalation) - Category 4
		SKIN IRRITATION - Category 2
		EYE IRRITATION - Category 2A
		SPECIFIC TARGET ORGAN TOXICITY (SINGLE
		EXPOSURE) (Respiratory tract irritation) -
		Category 3
		AQUATIC HAZARD (LONG-TERM) - Category 2
Talc , not containing asbestiform fibres	CAS: 14807-96-6	SPECIFIC TARGET ORGAN TOXICITY (SINGLE
		EXPOSURE) (Respiratory tract irritation) -
		Category 3
cumene	CAS: 98-82-8	FLAMMABLE LIQUIDS - Category 3
		CARCINOGENICITY - Category 2
zinc bis(2-ethylhexanoate)	CAS: 136-53-8	EYE IRRITATION - Category 2A
		TOXIC TO REPRODUCTION - Category 1B
		AQUATIC HAZARD (ACUTE) - Category 1
		AQUATIC HAZARD (LONG-TERM) - Category 3

Section 12. Ecological information

A. **Ecotoxicity**

Product/ingredient name	Result	Species	Exposure
e thylbenzene	Acute EC50 1.8 mg/l Fresh water Chronic NOEC 1 mg/l Fresh water	Daphnia Daphnia - <i>Ceriodaphnia dubia</i>	48 hours
Solvent naphtha (petroleum), light aromatic	Acute LC50 8.2 mg/l	Fish	96 hours
Solvent naphtha (petroleum), heavy arom.	NOEL 0.48 mg/l Fresh water	Daphnia	21 days
zinc bis(2-ethylhexanoate)	EC50 16 mg/l LC50 107 mg/l	Daphnia Fish	48 hours 96 hours

B. Persistence and degradability

Product/ingredient name	Test	Result	Dose	Inoculum
ethylbenzene	-	79 % - Readily - 10 days	-	-
zinc bis(2-ethylhexanoate)	-	60 % - Readily - 28 days	-	-

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
✓ylene	-	-	Readily
ethylbenzene	-	-	Readily
zinc bis(2-ethylhexanoate)	-	-	Readily

C. Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
✓ylene	3.12	7.4 to 18.5	Low
ethylbenzene	3.6	79.43	Low
Solvent naphtha (petroleum), heavy arom.	2.8 to 6.5	-	High
1,2,4-trimethylbenzene	3.63	120.23	Low
cumene	3.55	35.48	Low
zinc bis(2-ethylhexanoate)	-	60960	High

Korea (GHS) Page: 11/14

Product name SIGMATHERM 350 ALUMINIUM

Section 12. Ecological information

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.
E. Marine pollutant substances	Not applicable.	Solvent naphtha (petroleum), light aromatic)	Not applicable.

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.

Korea (GHS) Page: 12/14

Product name SIGMATHERM 350 ALUMINIUM

Section 14. Transport information

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

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.

ISHA article 118 (Harmful substances

: None of the components are listed.

requiring permission)

Article 2 of Youth Protection Act on Substances Hazardous

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

to Youth

Exposure Limits of Chemical Substances and Physical Factors

The following components have an OEL:

Xylene

Aluminium powder (stabilized)

ethylbenzene

1,2,4-trimethylbenzene

Talc , not containing asbestiform fibres

cumene

ISHA Enforcement Regs: None of the components are listed.

Annex 19 (Exposure standards established for harmful factors)

ISHA Enforcement Regs Annex 21 (Harmful

factors subject to Work Environment

Measurement)
ISHA Enforcement Regs

Annex 22 (Harmful Factors Subject to Special Health Check-

Special He

Standard of Industrial Safety and Health

Annex 12 (Hazardous substances subject to

control)

: The following components are listed: xylene, aluminum and its compounds, ethyl

benzene, talc / soapstone

: The following components are listed: Xylene, Aluminum and its compounds, Ethyl

benzene

: The following components are listed: xylene, aluminum and its compounds, ethyl

benzene

B. Regulation according to Chemicals Control Act

Korea (GHS) Page: 13/14

Product name SIGMATHERM 350 ALUMINIUM

Section 15. Regulatory information

Article 11 (TRI) : The following components are listed: Xylene including o-,m-,p- isomer, Aluminium

> and its compounds, Ethylbenzene : None of the components are listed.

Article 18 Prohibited (K-

Reach Article 27)

Article 19 Subject to

authorization (K-Reach

Article 25)

: None of the components are listed.

Article 20 Restricted (K-

Reach Article 27)

: None of the components are listed.

Article 20 Toxic Chemicals (K-Reach

Article 20)

Korea inventory : All components are listed or exempted. **Article 39 (Accident** : None of the components are listed.

: Not applicable

Precaution Chemicals)

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

D. Wastes regulation 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 the product

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

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 1/9/2024

revision

C. Version : 16.04 Prepared by : EHS

D. Other

Indicates information that has changed from previously issued version.

Disclaimer

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.

> Korea (GHS) Page: 14/14