

SAFETY DATA SHEET

According to OSHA Hazcom Standard 29 CFR 1910.1200

EZ175PTA-1184

1. IDENTIFICATION

A. Product name

- EZ175PTA-1184

B. Recommended use and restriction on use

- General use : Epoxy Zinc Primer
- Restriction on use : Do not use except for purpose

C. Manufacturer / Supplier / Distributor information

○ Manufacturer information

- Company name : KCC Corporation
- Address : 30, Bangeojinsunhwando-ro, Dong-gu, Ulsan
- Emergency telephone number : 82-52-280-1717

○ Supplier/Distributor information

- Company name : KCC Corporation
- Address : 30, Bangeojinsunhwando-ro, Dong-gu, Ulsan
- Emergency telephone number : 82-52-280-1717

2. HAZARD IDENTIFICATION

A. GHS Classification

- Flammable liquids : Category2
- Skin sensitization : Category1A
- Germ cell mutagenicity : Category1B
- Carcinogenicity : Category1B
- Reproductive toxicity : Category2
- Acute aquatic toxicity : Category1
- Chronic aquatic toxicity : Category1

B. GHS label elements

○ Hazard symbols



○ Signal words

- Danger

○ Hazard statements

- H225 Highly flammable liquid and vapour
- H317 May cause an allergic skin reaction

- H340 May cause genetic defects
- H350 May cause cancer
- H361 Suspected of damaging fertility or the unborn child
- H400 Very toxic to aquatic life
- H410 Very toxic to aquatic life with long lasting effects

○ Precautionary statements

1) Prevention

- P201 Obtain special instructions before use.
- P202 Do not handle until all safety precautions have been read and understood.
- P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
- P233 Keep container tightly closed.
- P240 Ground and bond container and receiving equipment.
- P241 Use explosion-proof electrical/ventilating/lighting/equipment.
- P242 Use non-sparking tools.
- P243 Take action to prevent static discharges.
- P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
- P272 Contaminated work clothing should not be allowed out of the workplace.
- P273 Avoid release to the environment.
- P280 Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.

2) Response

- P302+P352 IF ON SKIN: Wash with plenty of soap and water.
- P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
- P308+P313 If exposed or concerned: Get medical advice/attention.
- P321 Specific treatment (if in eyes, wash with plenty of running water; if in contact with skin, wash with plenty of running water; if inhaled, move to fresh air; if ingested, seek medical advice on whether to induce vomiting).
- P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
- P362+P364 Take off contaminated clothing and wash before reuse.
- P370+P378 In case of fire: Use Suitable extinguishing media for extinction(Refer Section MSDS 5).
- P391 Collect spillage.

3) Storage

- P403+P235 Store in a well-ventilated place. Keep cool.
- P405 Store locked up.

4) Disposal

- P501 Dispose of contents/container in accordance with local/regional/national/international regulation

C. Other hazards which do not result in classification

- Not available

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	Trade names and Synonyms	CAS No.	Content(%)
Zinc	Zinc powder ; Zinc metal ;	7440-66-6	73 ~ 80
4,4'-(1-Methylethylidene)bisphenol polymer with 2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bis[oxirane]	Epi-Rez 5223	25036-25-3	1 ~ 8
Xylene	Xylol ; Methyltoluene	1330-20-7	1 ~ 8
Solvent naphtha (petroleum), light arom.	Naphtha	64742-95-6	1 ~ 8
Zinc oxide	C.I. PIGMENT WHITE 4	1314-13-2	1 ~ 6

2-Propanol	Isopropanol ; Dimethylcarbinol ; Isopropyl alcohol ; n-Propan-2-ol ; Propan-2-ol ; i-Propyl alcohol ; 2-Propanol	67-63-0	1 ~ 6
Propylene glycol methyl ether	1-Methoxy-2-hydroxypropane ; 2-Methoxy-1-methylethanol ; Alpha-propylene glycol monomethyl ether ; 1-Methoxy-2-propanol ; Propylene glycol methyl ether ; 1-Methoxy-propane-2-ol ; Methoxyisopropanol	107-98-2	1 ~ 6
4-Methyl-2-pentanone	2-Methyl-4-pentanone ; 2-Methylpropyl methyl ketone ; Hexanone ; 4-Methyl-2-pentanone ; Isobutyl methyl ketone ; Hexone ; 4-Methylpentan-2-one ; Isopropylacetone ;	108-10-1	1 ~ 6
Ethylbenzene	Benzene, ethyl- ; Ethyl benzene ; Ethylbenzol ; Phenylethane ;	100-41-4	0.1~1

4. FIRST AID MEASURES

A. Eye contact

- Do not rub your eyes.
- Immediately flush eyes with plenty of water for at least 15 minutes and call a doctor/physician.
- Get medical attention immediately.

B. Skin contact

- Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes.
- Wash contaminated clothing thoroughly before re-using.
- Get medical attention immediately.
- Go to the hospital immediately if symptoms(flare, irritate) occur.
- Remove contaminated clothing, shoes and isolate.
- Wash thoroughly after handling.
- Wear gloves when washing the patient, and please avoid contact with contaminated clothing.

C. Inhalation contact

- Take specific treatment if needed.
- When exposed to large amounts of steam and mist, move to fresh air.
- Get medical attention immediately.
- If breathing is stopped or irregular, give artificial respiration and supply oxygen.

D. Ingestion contact

- Please be advised by doctor whether induction of vomit is demanded or not.
- Rinse your mouth with water immediately.
- Get medical attention immediately.

E. Delayed and immediate effects and also chronic effects from short and long term exposure

- Not available

F. Notes to physician

- Notify medical personnel of contaminated situations and have them take appropriate protective measures.
- If exposed or concerned, get medical attention/advice.

5. FIREFIGHTING MEASURES

A. Suitable (Unsuitable) extinguishing media

- Avoid use of water jet for extinguishing
- Dry chemical, carbon dioxide, regular foam extinguishing agent, spray

B. Specific hazards arising from the chemical

- Highly flammable liquid and vapour
- May cause an allergic skin reaction
- May cause cancer
- May cause genetic defects
- Suspected of damaging fertility or the unborn child

C. Special protective actions for firefighters

- Avoid inhalation of materials or combustion by-products.
- Cool containers with water until well after fire is out.
- Do not approach the tank surrounded by fire until it is extinguished.
- In case of conflagration, use automatic fire sprinkler. Major fire may require withdrawal, allowing the object itself to burn.
- Keep unauthorized personnel out.

6. ACCIDENTAL RELEASE MEASURES

A. Personal precautions, protective equipment and emergency procedures

- Do not touch spilled material. Stop leak if you can do it without risk.
- Handle the damaged containers or spilled material after wearing appropriate protective equipment
- Move container to safe area from the leak area.
- Must work against the wind, let the upwind people to evacuate.
- Remove all sources of ignition.

B. Environmental precautions

- If large amounts have been spilled, inform the relevant authorities.
- Prevent runoff and contact with waterways, drains or sewers.

C. Methods and materials for containment and cleaning up

- Appropriate container for disposal of spilled material collected.
- Dike for later disposal.
- Disposal of waste shall be in compliance with the Wastes Control Act
- Large spill : Stay upwind and keep out of low areas. Dike for later disposal.
- Notify the central and local government if the emission reach the standard threshold.

7. HANDLING AND STORAGE

A. Precautions for safe handling

- Avoid contact with incompatible materials.
- Avoid direct physical contact.
- Comply with all applicable laws and regulations for handling
- Dealing only with a well-ventilated place.
- Do not handle until all safety precautions have been read and understood.

B. Conditions for safe storage, including any incompatibilities

- Avoid direct sunlight.
- Check regularly for leaks.
- Do not apply any physical shock to container.
- Do not apply direct heat.
- Do not use damaged containers.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

A. Exposure limits

○ ACGIH TLV

- [Xylene] : TWA 20 ppm
- [Zinc oxide] : TWA 2 mg/m³, Respirable particulate mass STEL 10 mg/m³, Respirable particulate mass
- [2-Propanol] : TWA, 200 ppm (491 mg/m³), STEL, 400 ppm (984 mg/m³)
- [Propylene glycol methyl ether] : TWA, 50 ppm (184 mg/m³), STEL, 100 ppm (369 mg/m³)

- [4-Methyl-2-pentanone] : TWA, 20 ppm (82 mg/m³) STEL 75 ppm (307 mg/m³)
- [Ethylbenzene] : TWA, 20 ppm (87 mg/m³)

○ OSHA PEL

- [Xylene] : 100 ppm, 435 mg/m³
- [Zinc oxide] : 5 mg/m³
- [Zinc oxide] : 15 mg/m³ (Total dust), 5 mg/m³ (Respirable fraction)
- [2-Propanol] : 400 ppm, 980 mg/m³
- [4-Methyl-2-pentanone] : 100 ppm, 410 mg/m³
- [Ethylbenzene] : 100 ppm, 435 mg/m³

B. Engineering controls

- Business owner is recommended to maintain below recommended exposure limits for the working place with general exhaust of gas/vapour/mist/fume.

C. Individual protection measures, such as personal protective equipment

○ Respiratory protection

- Any chemical cartridge respirator with organic vapor cartridge(s).
- Any chemical cartridge respirator with a full facepiece and organic vapor cartridge(s).
- Respiratory protection is ranked in order from minimum to maximum.
- Any air-purifying respirator with a full facepiece and an organic vapor canister.
- Consider warning properties before use.
- For Unknown Concentration or Immediately Dangerous to Life or Health : Any supplied-air respirator with full facepiece and operated in a pressure-demand or other positive-pressure mode in combination with a separate escape supply. Any self-contained breathing apparatus with a full facepiece.
- Under conditions of frequent use or heavy exposure, Respiratory protection may be needed.

○ Eye protection

- Wear primary eye protection such as splash resistant safety goggles with a secondary protection face shield.
- Provide an emergency eye wash station and quick drench shower in the immediate work area.

○ Hand protection

- Wear appropriate chemical resistant glove.

○ Skin protection

- Wear appropriate chemical resistant protective clothing.

○ Others

- Not available

9. PHYSICAL AND CHEMICAL PROPERTIES

A. Appearance	
- Appearance	Liquid(Viscous liquid)
- Color	Grey
B. Odor	Solvent odor
C. Odor threshold	Not available
D. pH	Not available
E. Melting point/Freezing point	Not available
F. Initial Boiling Point/Boiling Ranges	Not available
G. Flash point	15°C
H. Evaporation rate	Not available
I. Flammability(solid, gas)	Not available
J. Upper/Lower Flammability or explosive limits	Not available
K. Vapour pressure	Not available

L. Solubility	Not available
M. Vapour density	> 1(Air=1)
N. Specific gravity(Relative density)	3.0 ~ 3.2
O. Partition coefficient of n-octanol/water	Not available
P. Autoignition temperature	399°C
Q. Decomposition temperature	Not available
R. Viscosity	79 ~ 83 KU
S. Molecular weight	Not available

10. STABILITY AND REACTIVITY

A. Chemical Stability

- This material is stable under recommended storage and handling conditions.

B. Possibility of hazardous reactions

- Cylinders exposed to fire may vent and release flammable gas.

C. Conditions to avoid

- Avoid contact with incompatible materials and condition.
- Avoid: Heating, Flames and hot surfaces
- Avoid contact with heat, sparks, flame or other ignition sources.

D. Incompatible materials

- Sparks, flames, static electricity, strong acids and base substances

E. Hazardous decomposition products

- May emit flammable vapour if involved in fire.

11. TOXICOLOGICAL INFORMATION

A. Information on the likely routes of exposure

- ☐ Respiratory tracts
 - Not available
- ☐ Oral
 - Not available
- ☐ Eye-Skin
 - May cause an allergic skin reaction

B. Delayed and immediate effects and also chronic effects from short and long term exposure

- ☐ Acute toxicity
 - * Oral
 - Product (ATEmix) : 2000mg/kg < ATEmix <= 5000mg/kg
 - [Zinc] : LD50 > 2000 mg/kg Rat (OECD TG 401, GLP) (ECHA)
 - [4,4'-(1-Methylethylidene)bisphenol polymer with 2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bis[oxirane]] : LD50 > 2000 mg/kg Rat (NICS)
 - [Xylene] : LD50 3523 mg/kg Rat (EU Method B.1) (ECHA)
 - [Solvent naphtha (petroleum), light arom.] : LD50 > 5000 mg/kg Rat (Read across 86290-81-5) (OECD TG 401, GLP) (ECHA)
 - [Zinc oxide] : LD50 > 5000 mg/kg Mouse (OECD TG 423) (ECHA)
 - [2-Propanol] : LD50 5840 mg/kg Rat (OECD TG 401) (ECHA)
 - [Propylene glycol methyl ether] : LD50 4016 mg/kg Rat (EU Method B.1, GLP) (ECHA)
 - [4-Methyl-2-pentanone] : LD50 2080 mg/kg Rat (OECD TG 401) (ECHA)
 - [Ethylbenzene] : LD50 3500 mg/kg Rat (ECHA)
 - * Dermal
 - Product (ATEmix) : 2000mg/kg < ATEmix <= 5000mg/kg

- [4,4'-(1-Methylethylidene)bisphenol polymer with 2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bis[oxirane]] : LD50 > 2000 mg/kg Rat (NICS)
- [Xylene] : LD50 1700 mg/kg Rabbit (NITE)、EU Harmonized Cat. 4 (ECHA)
- [Solvent naphtha (petroleum), light arom.] : LD50 > 2000 mg/kg Rabbit (Read across 86290-81-5) (OECD TG 402, GLP) (ECHA)
- [Zinc oxide] : LD50 > 2000 mg/kg Rat (OECD TG 402, GLP) (ECHA)
- [2-Propanol] : LD50 12800 mg/kg (16.4 mL/kg) Rabbit (OECD TG 402) (ECHA)
- [Propylene glycol methyl ether] : LD50 > 2000 mg/kg Rat (EU Method B.3, GLP) (ECHA)
- [4-Methyl-2-pentanone] : LD50 > 2000 mg/kg Rat (NICS)
- [Ethylbenzene] : LD50 15432 mg/kg (17.8 mL/kg) Rabbit (ECHA)

* Inhalation

- Product (ATEmix) : 20.0mg/L < ATEmix ≤ 50.0mg/L, Vapour, 4hr
- [Zinc] : Dust LC50 > 5.41 mg/L 4 hr Rat (OECD TG 403, GLP) (ECHA)
- [Xylene] : Vapor LC50 > 10 ~ 20 mg/L 4hr, EU Harmonized Cat. 4 (ECHA)
- [Solvent naphtha (petroleum), light arom.] : Vapour LC50 > 7.63 mg/L Rat 4 hr (Read across 86290-81-5) (OECD TG 403, GLP) (ECHA)
- [Zinc oxide] : Aerosol LC50 > 5.7 mg/L air 4 hr Rat (OECD TG 403) (ECHA)
- [2-Propanol] : Vapor LC50 > 30.1 mg/L 4 hr (>10000 ppm 6 hr) Rat (OECD TG 403, GLP) (ECHA)
- [Propylene glycol methyl ether] : Vapor LC50 10 ~ 20 mg/L (Gas 6038~7558 ppm) 4hr Rat (NITE)
- [4-Methyl-2-pentanone] : Vapor LC50 11.6 mg/L 4hr Rat (OECD TG 403) (ECHA)
- [Ethylbenzene] : Vapor LC50 18.96 mg/L 4 hr Rat (NICS)

○ Skin corrosion/irritation

- Not available

○ Serious eye damage/irritation

- Not available

○ Respiratory sensitization

- Not available

○ Skin sensitization

- May cause an allergic skin reaction

○ Carcinogenicity

* IARC

- [Xylene] : Group 3
- [2-Propanol] : Group 3
- [4-Methyl-2-pentanone] : Group 2B
- [Ethylbenzene] : Group 2B

* OSHA

- Not available

* ACGIH

- [Xylene] : A4
- [2-Propanol] : A4
- [Propylene glycol methyl ether] : A4
- [4-Methyl-2-pentanone] : A3
- [Ethylbenzene] : A3

* NTP

- Not available

* EU CLP

- [Solvent naphtha (petroleum), light arom.] : Carc. 1B (Note P)

- [4-Methyl-2-pentanone] : Carc.2
- Germ cell mutagenicity
 - May cause genetic defects
- Reproductive toxicity
 - Suspected of damaging fertility or the unborn child
- STOT-single exposure
 - Not available
- STOT-repeated exposure
 - Not available
- Aspiration hazard
 - Not available

12. ECOLOGICAL INFORMATION

A. Ecotoxicity

- Fish
 - [Zinc] : LC50 0.315 mg/L 96 hr *Thymallus arcticus* (Read-across 7646-85-7), NOEC 0.036 mg/L 25 d *Oncorhynchus mykiss* (Read-across 7733-02-0) (ECHA)
 - [4,4'-(1-Methylethylidene)bisphenol polymer with 2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bis[oxirane]] : LC50 > 100 mg/L 96 hr *O. latipes* (NICS)
 - [Xylene] : LC50 7.6 mg/L 96 hr *Oncorhynchus mykiss* (Read-across 95-47-6) (OECD TG 203) (ECHA), NOEC 0.714 mg/L 35 d *Danio rerio* (Read-across 106-42-3) (OECD TG 210, GLP) (ECHA)
 - [Solvent naphtha (petroleum), light arom.] : LL50 8.2 mg/L 96hr *Pimephales promelas* (Read-across Light alkylate naphtha) (EPA 66013-75-009, GLP), NOELR 2.6 mg/L 14d *Pimephales promelas* (Read-across Light Catalytically Reformed Naphtha) (OECD TG 204, GLP) (ECHA)
 - [Zinc oxide] : LC50 0.169 mg/L 96 hr *Oncorhynchus mykiss* (Read across) (NICS)
 - [2-Propanol] : LC50 9640 mg/L 96 hr *Pimephales promelas* (ECHA)
 - [Propylene glycol methyl ether] : LC50 >= 1000 mg/L 96hr *Oncorhynchus mykiss* (OECD TG 203, ECHA)
 - [4-Methyl-2-pentanone] : LC50 > 179 mg/L 96hr *Danio rerio* (OECD TG 203, GLP) (ECHA)
 - [Ethylbenzene] : LC50 4.2 mg/L 96 hr *Oncorhynchus mykiss* (NICS)
- Crustaceans
 - [Zinc] : LC50 0.1 mg/L 48 hr *Daphnia magna* (Read-across 7646-85-7), NOEC 0.035 mg/L 21 d *Daphnia magna* (Read-across 7646-85-7) (ECHA)
 - [4,4'-(1-Methylethylidene)bisphenol polymer with 2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bis[oxirane]] : EC50 > 100 mg/L 48 hr *D. magna* (NICS)
 - [Xylene] : EC50 4.7 mg/L 48 hr *Daphnia magna* (Read-across 108-38-3) (NIER), NOEC 1.17 mg/L 7 d *Ceriodaphnia dubia* (ECHA)
 - [Solvent naphtha (petroleum), light arom.] : EL50 4.5 mg/L 48hr *Daphnia magna* (Read-across straight-run light gasoline) (OECD TG 202, GLP), NOELR 2.6 mg/L 21d (Read-across Light alkylate naphtha) (OECD TG 211, GLP) (ECHA)
 - [Zinc oxide] : EC50 0.416 mg/L 48 hr *C. dubia* (Read across) (NICS)
 - [Propylene glycol methyl ether] : LC50 21100 ~ 25900 mg/L 48hr *Daphnia magna* (GLP, ECHA)
 - [4-Methyl-2-pentanone] : EC50 > 200 mg/L 48hr *Daphnia magna* (OECD TG 202, GLP), NOEC 30 mg/L 21 d *Daphnia magna* (OECD TG 211) (ECHA)
 - [Ethylbenzene] : EC50 1.8~2.4 mg/L 48 hr *Daphnia magna*, NOEC 0.96 mg/L 7 d *Ceriodaphnia dubia* (ECHA)
- Algae
 - [Zinc] : NOEC 0.05 mg/L 72 hr *Raphidocelis subcapitata* (OECD TG 201, GLP) (ECHA), NOEC 0.024 mg Zn/L 72 hr *P. subcapitata* (NICS)
 - [4,4'-(1-Methylethylidene)bisphenol polymer with 2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bis[oxirane]] : ErC50 > 100 mg/L, NOEC 100 mg/L 72 hr *P. subspicatus* (NICS)
 - [Xylene] : EC50 4.7 mg/L 72 hr *Raphidocelis subcapitata* (Read-across 95-47-6) (OECD TG 201) (ECHA)
 - [Solvent naphtha (petroleum), light arom.] : EL50 3.1 mg/L, NOELR 0.5 mg/L 72hr *Selenastrum capricornutum* (Read-across Blended Gasoline) (OECD TG 201, GLP) (ECHA)
 - [Zinc oxide] : EC50 0.136 mg/L 72 hr *P. subcapitata* (NICS)

- [Propylene glycol methyl ether] : EC50 > 1000 mg/L 7d Raphidocelis subcapitata (OECD TG 201, GLP) (ECHA)
- [Ethylbenzene] : EC50 3.6 mg/L 96 hr, NOEC 3.4 mg/L 96 hr Raphidocelis subcapitata (ECHA)

B. Persistence and degradability

○ Persistence

- [Xylene] : log Pow 3.12 (Read-across 95-47-6) (ECHA)
- [2-Propanol] : log Pow 0.05 (25 °C) (ECHA)
- [Propylene glycol methyl ether] : log Pow < 1 (20 °C, pH 6.8) (OECD TG 117) (ECHA)
- [4-Methyl-2-pentanone] : log Kow 1.9 (pH 6.7) (OECD TG 117) (ECHA)
- [Ethylbenzene] : log Pow 3.6 (20 °C) (ECHA)

○ Degradability

- [2-Propanol] : BOD5/COD ratio ≥ 0.5, biodegrades immediately (ECHA)

C. Bioaccumulative potential

○ Bioaccumulative potential

- [Zinc] : BCF 2.92 ~ 69.48 (7 ~ 21 d, C. fusca) (Read across) (NICS)
- [Xylene] : BCF 25.9 dimensionless (ECHA)
- [Zinc oxide] : BCF 78 ~ 2060 dimensionless (ECHA)
- [Ethylbenzene] : BCF 1 (ECHA)

○ Biodegradation

- [Xylene] : Readily biodegradable, 94 % 28 d (O2 consumption) (Read-across 95-47-6) (OECD TG 301 F, GLP) (ECHA)
- [2-Propanol] : Readily biodegradable, BOD5/COD ratio ≥ 0.5 (EU Method C.5 and EU Method C.6) (ECHA)
- [Propylene glycol methyl ether] : Readily biodegradable, 96 % degradation (DOC removal) 28 d (OECD TG 301 E, GLP) (ECHA)
- [4-Methyl-2-pentanone] : Readily biodegradable, 83 % degradation (O2 consumption) 28d (OECD TG 301 F, GLP) (ECHA)
- [Ethylbenzene] : Readily biodegradable, 70~ 80 % 28 d (inorg. C analysis) (ISO 14593-CO2-Headspace Test) (ECHA)

D. Mobility in soil

- [Xylene] : log Koc ca. 2.73 dimensionless (Read-across 95-47-6) (OECD TG 121) (ECHA)
- [2-Propanol] : log Koc 0.03 (SIDS)

E. Other adverse effects

- [Zinc] : Chronic aquatic EU harmonised Cat.1 (ECHA)
- [Zinc oxide] : Acute & Chronic aquatic toxicity Cat.1 (NICS), Acute & Chronic aquatic toxicity EU harmonized Cat.1 (ECHA)

13. DISPOSAL CONSIDERATIONS

A. Disposal methods

- It shall be treated by incineration
- Oil water separation technology shall be applied as pre-waste treatment if it is applicable
- Stabilization and minimization treatment by incineration or similar method can be applied, if more than two kinds of designated wastes are in mixture state and it is impractical to separate them
- High temperature incinerate
- After taking off organic solvents that are supposed to be recycled, incinerate the rest of them at a high degree.

B. Special precautions for disposal

- Anyone with business license number who generates industrial wastes shall treat the waste by him/herself or by entrusting to the legal entities who treat the wastes, recycle the wastes of others or install and operate the waste treatment facilities according to the Wastes Control Act
- Dispose of waste in accordance with all applicable laws and regulations.

14. TRANSPORT INFORMATION

A. UN No. (IMDG CODE/IATA DGR)

- 1263

B. Proper shipping name

- PAINT (including paint, lacquer, enamel, stain, shellac, varnish, polish, liquid filler and liquid lacquer base)(500000044091)

C. Hazard Class

- 3

D. IMDG CODE/IATA DGR Packing group

- II

E. Marine pollutant

- Applicable

F. Special precautions for user related to transport or transportation measures

- Local transport follows in accordance with Dangerous goods Safety Management Law.
- Package and transport follow in accordance with Department of Transportation (DOT) and other regulatory agency requirements.
- EmS FIRE SCHEDULE : F-E (Non-water-reactive flammable liquids)
- EmS SPILLAGE SCHEDULE : S-E (Flammable liquids, floating on water)

15. REGULATORY INFORMATION

A. National and/or international regulatory information

○ POPs Management Law

- Not applicable

○ Information of EU Classification

* Classification

- [Zinc] : H250,H260,H400,H410
- [Xylene] : H226,H312,H315,H332
- [Solvent naphtha (petroleum), light arom.] : H304,H340,H350
- [Zinc oxide] : H400,H410
- [2-Propanol] : H225,H319,H336
- [Propylene glycol methyl ether] : H226,H336
- [4-Methyl-2-pentanone] : H225,H319,H332,H335,H351
- [Ethylbenzene] : H225,H304,H332,H373

○ U.S. Federal regulations

* OSHA PROCESS SAFETY (29CFR1910.119)

- Not applicable

* CERCLA Section 103 (40CFR302.4)

- [Zinc] : 453.599 kg 1000 lb
- [Xylene] : 45.3599 kg 100 lb
- [4-Methyl-2-pentanone] : 2267.995 kg 5000 lb
- [Ethylbenzene] : 453.599 kg 1000 lb
- [4,4'-(1-Methylethylidene)bisphenol polymer with 2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bis[oxirane]] : Not applicable
- [Solvent naphtha (petroleum), light arom.] : Not applicable
- [Zinc oxide] : Not applicable
- [2-Propanol] : Not applicable
- [Propylene glycol methyl ether] : Not applicable

* EPCRA Section 302 (40CFR355.30)

- Not applicable

* EPCRA Section 304 (40CFR355.40)

- Not applicable

* EPCRA Section 313 (40CFR372.65)

- [Zinc] : Applicable
- [Xylene] : Applicable
- [2-Propanol] : Applicable
- [4-Methyl-2-pentanone] : Applicable
- [Ethylbenzene] : Applicable
- [4,4'-(1-Methylethylidene)bisphenol polymer with 2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bis[oxirane]] : Not applicable
- [Solvent naphtha (petroleum), light arom.] : Not applicable
- [Zinc oxide] : Not applicable
- [Propylene glycol methyl ether] : Not applicable
- ☐ Rotterdam Convention listed ingredients
 - Not applicable
- ☐ Stockholm Convention listed ingredients
 - Not applicable
- ☐ Montreal Protocol listed ingredients
 - Not applicable

16. OTHER INFORMATION

A. Reference

- The information contained herein is believed to be accurate. It is provided independently of any sale of the product for purpose of hazard communication. It is not intended to constitute performance information concerning the product. No express warranty, or implied warranty of merchantability or fitness for a particular purpose is made with respect to the product or the information contained herein.
- This Safety Data Sheet was compiled with data and information from the following sources: KOSHA, NITE, ESIS, NLM, SIDS, IPCS

B. Issue date

- 2013-04-24

C. Revision number and Last date revised

- 12 times, 2026-02-11

D. Other

- This SDS is prepared according to the Globally Harmonized System (GHS).