

# SAFETY DATA SHEET

SDS Number: SDS-70363

Version No: 003

Revision Date/Version No:08-02-2024 /3/3.5.5

# 1. IDENTIFICATION OF THE SUBSTANCE / MIXTURE AND OF THE COMPANY / UNDERTAKING

ZINKY-26 EPOXY ZINC PRIMER 65	
Solvent-Based Protective Coating	
Nippon Paint (S) Co. Pte Ltd No. 1 First Lok Yang Road Jurong Singapore 629728	
(65) 6 265 5355	
(65) 6 264 1603	
	Solvent-Based Protective Coating Nippon Paint (S) Co. Pte Ltd No. 1 First Lok Yang Road Jurong Singapore 629728 (65) 6 265 5355

# 2. HAZARDS IDENTIFICATION

# **GHS Classification:**

Physical Hazard	
Flammable Hazard	Category 3
Health Hazard	
Skin corrosion/irritation	Category 2
Serious eye damage/irritation	Category 1
Skin sensitization	Category 1
Environmental Hazard	
Aquatic Acute	Category 1
Aquatic Chronic	Category 1

GHS Pictogram



Signal Word Danger

Hazard statements

H226: Flammable liquid and vapour

H315: Causes skin irritation

H317: May cause an allergic skin reaction

H318: Causes serious eye damage

H400: Very toxic to aquatic life

H410: Very toxic to aquatic life with long lasting effects

Precautionary statements

P210: Keep away from heat/sparks/open flames/hot surfaces - No smoking

P233: Keep container tightly closed

P240: Ground/bond container and receiving equipment

P241: Use explosion-proof electrical/ventilating/light/equipment

P242: Use only non-sparking tools

P243: Take precautionary measures against static discharge

P261: Avoid breathing dust/fume/gas/mist/vapours/spray

P264: Wash hands thoroughly after handling

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

## **Response**

P310: Immediately call a POISON CENTER or doctor/physician

P321: Specific treatment (see Section 4 of SDS)

P362: Take off contaminated clothing and wash before reuse

P363: Wash contaminated clothing before reuse

P391: Collect spillage

P302+352: IF ON SKIN: Wash with soap and water

P332+313: If skin irritation occurs: Get medical advice/attention

P333+313: If skin irritation or a rash occurs: Get medical advice/attention

P370+378: In case of fire: Use appropriate media for extinction

P303+361+353: IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower

P305+351+338: IF IN EYES: Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing

# <u>Storage</u>

P403+235: Store in a well ventilated place. Keep cool

## <u>Disposal</u>

P501: Dispose of contents/container to appropriate waste site or reclaimer in accordance with local or national regulations

# 3. COMPOSITION / INFORMATION ON INGREDIENTS

Substances	CAS No.	%
Zinc	7440-66-6	29-65
Bisphenol-A type solid epoxy resin	25036-25-3	4-8
1-Butanol	71-36-3	4-8
Xylene	1330-20-7	3-7
Zinc oxide	1314-13-2	2-4
Substances determined to be non-hazardous	-	Balance
		100%

# 4. FIRST-AID MEASURES

## INHALATION

- Move person to fresh air and call for medical assistance immediately.
- If not breathing, give artificial respiration, if breathing is difficult, give oxygen. Keep at rest.

## SKIN CONTACT

- In case of contact, immediately flush skin with large amounts of water and soap while removing contaminated clothing and shoes.
- If irritation persists, get medical attention.

## EYE CONTACT

- Immediately flush eyes with large amounts of water until irritation subsides.
- Remove contact lens.
- Obtain medical attention, preferably by an ophthalmologist, immediately.

## INGESTION

 DO NOT induce vomiting unless directed to do so by a medical personnel. Never give anything by mouth to an unconscious person. Keep at rest. Get medical attention immediately.

# **5. FIRE FIGHTING MEASURES**

## SUITABLE FIRE EXTINGUISHING MEDIA

• Alcohol - resistant foam, Carbon dioxide, or dry chemical type.

## SPECIFIC HAZARDS ARISING FROM THE CHEMICAL

 Combustion products may include and are not limited to: Carbon monoxide and Carbon dioxide.

# SPECIAL PROTECTIVE ACTIONS FOR FIRE FIGHTERS

- Wear full protective clothing and NIOSH approved self contained breathing apparatus.
- Use water spray to cool fire exposed surfaces and to protect personnel. If a leak or spill has not ignited, use water spray to disperse the vapours.
- If possible, isolate product from heat, electrical equipments, sparks and open flames.
- · Avoid spraying water directly into storage containers.
- · Closed containers may explode when exposed to extreme heat.
- Avoid spreading burning liquid with water, isolate liquid.
- Do not allow runoff from fire fighting to enter drains or watercourses.

# 6. ACCIDENTAL RELEASE MEASURES

## PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURE

- Wear appropriate protective equipment, e.g. respirators, eye protection, gloves and safety shoes.
- Avoid substance contact with eyes. Do not inhale vapours.
- Ensure supply of fresh air in enclosed rooms.

## **ENVIRONMENTAL PRECAUTIONS**

- Eliminate sources of ignition.
- Keep public away.
- · Contain spilled liquid with sand or other non-combustible absorbent materials.
- Wash area and prevent runoff into drains and sewerage system.
- Advise authorities if substance has entered a watercourse or sewer or has contaminated soil or vegetation.

## METHODS AND MATERIALS FOR CONTAINMENTS AND CLEANING UP

- Clean up all spills immediately.
- Absorb spill with absorbent and inert material, then place in container.
- Disposal in accordance to local/national regulations.

# 7. HANDLING AND STORAGE

#### PRECAUTIONS FOR SAFE HANDLING

- Use appropriate personal protective equipment
- Keep out of reach of children.
- Handle containers with care. Open slowly in order to control possible pressure release.
- Do not pressurize containers.
- Do not ingest. Do not breathe in gas/fumes/vapour. Avoid contact with skin and eyes.
- For personal protection, see section 8.
- Use only in areas from which all naked lights and other sources of ignition have been excluded.
- Take precautionary measures against static discharge
- Protect from frost and extremes of temperature

#### CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILTIES

- Keep containers tightly closed
- Containers that are opened should be properly resealed and kept upright to prevent leakage.
- Store in cool, dry and well ventilated place at temperature between 20°C to 40°C away from heat and sources of ignition

# 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

#### **CONTROL PARAMETERS/OCCUPATIONAL LIMITS**

Substances	ACGIH <sup>-</sup> ppm	TLV-TWA mg/m3	OSHA F ppm	PEL-TWA mg/m3
Zinc	-	_	-	_
Bisphenol-A type solid epoxy resin	-	-	-	-
1-Butanol	-	-	-	-
Xylene	100	434.00	-	-
Zinc oxide	-	-	-	-

#### APPROPRIATE ENGINEERING CONTROL MEASURES

- Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapours below their respective occupational exposure limits.
- Ensure eyewash stations and safety showers are close to the workstation location.

#### PERSONAL PROTECTION

Respiratory Protection:	Use of NIOSH - approved respirators with organic vapour cartridges is recommended.
Hand Protection:	Use of solvent resistance type or chemical resistant type of protective gloves is recommended.
Eye Protection:	Use of safety glasses or goggles with side shields is recommended.
Skin / Body Protection:	Wear chemical resistant clothes and safety shoes when handling product.

# 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	: Liquid
Odour	: Aromatic hydrocarbon odour
	•
Odour threshold	: Not available
рН	: Not available
Melting point/freezing point	: Not available
Initial boiling point and boiling range	: Between 117 and 143 °C
Flash point	: 23 °C
Evaporation rate	: Not available
Flammability (solid, gas)	: Not applicable
Lower flammability or explosive limit	: 1.1 % by vol
Upper flammability or explosive limit	: 11.2 % by vol
Vapour pressure	: Not available
Vapour density	: > 1.00 (Vapour is heavier than air)
Relative density	: Not available
Solubility	: Not Miscible in water
Partition coefficient	: Not available
Auto-ignition temperature	: > 527 °C
Decomposition temperature	: Not available
Viscosity	: 112 - 118 KU

# **10. STABILITY AND REACTIVITY**

## REACTIVITY

• No dangerous reaction known under condition of normal use

## CHEMICAL STABILITY

• The product is stable under recommended storage and handling conditions. (see section7)

## POSSIBILITY OF HAZARDOUS REACTION

 $\,\circ\,$  Under normal conditions of storage and use, hazardous reaction will not occur

# CONDITIONS TO AVOID

 Keep away from oxidising agents, strongly alkaline and strongly acidic materials in order to avoid exothermic reactions. Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, drill, grind or expose containers to heat or sources of ignition

# HAZARDOUS DECOMPOSITION PRODUCTS

• When exposed to high temperatures may produce hazardous decomposition products such as carbon monoxide, carbon dioxide, oxides of nitrogen and smoke.

# **11. TOXICOLOGICAL INFORMATION**

There is no data available on the product itself. Toxicological information of substances:

## Acute oral toxicity

Harmful if swallowed

Substances	<u>Oral LD50(Rat), mg/kg</u>
Zinc	Data not available
Bisphenol-A type solid epoxy resin	2001
1-Butanol	790
Xylene	4300
Zinc oxide	Data not available
Acute dermal/skin toxicity May be harmful if in contact with skin	
Substances	<u>Dermal LD50 (Rabbit), mg/kg</u>
Zinc	Data not available
Bisphenol-A type solid epoxy resin	2001
1-Butanol	3400

# Acute inhalation toxicity

**Xylene** 

Zinc oxide

Vapour concentrations above the recommended exposure levels may be irritating to the eyes and the respiratory tract, may cause headaches and dizziness, could be anesthetic and may have other central nervous system effects.

1700

Data not available

Substances	Inhalation Vapor LC50 (Rat), mg/L/4hr
Zinc	Data not available
Bisphenol-A type solid epoxy resin	Data not available
1-Butanol	8000
Xylene	5000
Zinc oxide	Data not available

## Skin corrosion or irritation

Causes skin irritation. Frequent or prolonged contact may dry the skin, leading to discomfort and dermatitis.

## Serious eye damage or irritation

May be an eye irritant

## Respiratory or skin sensitisation

Vapour concentrations above the recommended exposure levels may be irritating to the eyes and the respiratory tract

## Germ cell mutagenicity

No information available on the product

## **Carcinogenicity**

#### **Crystalline Silica**

The International Agency for Research on Cancer (IARC) has classified inhaled crystalline silica (CAS No. 14808-60-7) as a Group 1 carcinogen based on sufficient evident of carcinogenicity in humans and experimental animals. Exposure to inhaled crystalline silica can only occur when it is present in respirable form. Normal application procedures pose no hazard since the crystalline silica is wet and encapsulated, but grinding or sanding dried films of this product may yield respirable silica dusts.

## **Reproductive toxicity**

No information available on the product

# Specific Target Organ Toxicity (STOT)-single exposure

No information available on the product

# Specific Target Organ Toxicity (STOT)-repeated exposure

No information available on the product

## Asphyxiation hazard

May be harmful if swallowed and enters airways

# **12. ECOLOGICAL INFORMATION**

# Toxicity

Aquatic toxicity -No data available

# Persistence and degradability

Biodegradation -No data available

# **Bioaccumulative potential**

No data available

# Mobility in soil

No data available

# Result of PBT and vPvB assessment

No data available

# Other adverse effects

There is no ecotoxicological test data available on the product itself. The product should not be allowed to enter drains or water courses.

# **13. DISPOSAL CONSIDERATIONS**

The product should not be allowed to enter drains and watercourses.

Preferred methods of waste disposal are incineration or biological treatment in federal/state approved facility. Empty containers should be recycled or disposed through an approved waste management facility or licensed contractor.

All federal, state and local environmental regulations shall be observed.

# **14. TRANSPORT INFORMATION**

Transport to be in accordance with ADR/RID for road/rail, IMDG for sea and IATA for Air.

# LAND TRANSPORT

Classified as Dangerous Goods by the criteria of the European Agreement concerning the international carriage of Dangerous Goods (ADR) by Road & Regulations concerning the international carriage of Dangerous goods (RID) by Rail.

UN Number:	1263
Proper shipping name:	PAINT (including paint, lacquer, enamel, stain, shellac, varnish, polish, liquid filler and liquid lacquer base) or PAINT RELATED MATERIAL (including paint thinning or reducing compound)
Class:	3
Subsidary Risk(s):	-
Packaging Group:	III

# SEA TRANSPORT

Classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport of Sea.

UN Number:	1263
Proper shipping name:	PAINT (including paint, lacquer, enamel, stain, shellac, varnish, polish, liquid filler and liquid lacquer base) or PAINT RELATED MATERIAL (including paint thinning or reducing compound)
Class:	3
Subsidary Risk(s):	-
Packaging Group:	III
Marine Pollutant	No

#### SEA (ANNEX II OF MARPOL 73/78 AND THE IBC CODE)

Not applicable

## AIR TRANSPORT

Classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by Air

UN Number:	1263
Proper shipping name:	PAINT (including paint, lacquer, enamel, stain, shellac, varnish, polish, liquid filler and liquid lacquer base) or PAINT RELATED MATERIAL (including paint thinning or reducing compound)
Class:	3
Subsidary Risk(s):	-
Packaging Group:	III

# **15. REGULATORY INFORMATION**

Applicable national regulations:

- · Standards on Hazard communication for hazardous chemicals and dangerous goods
  - SS 586: Part 1: 2021-Transport and storage of dangerous goods
  - SS 586: Part 2: 2014-GHS of classification and labelling of chemicals
  - SS 586: Part 3: 2008(2014)-Preparation of safety data sheet
- MOM: Workplace Safety and Health Act & Workplace Safety and Health (General Provisions) Regulations

- This product is subject to SDS, labelling, PEL and other requirements in the Acts/Regulations.

- NEA: Environmental Protection and Management Act & Environmental Protection and Management (Hazardous Substances) Regulations
  - This product is not subject to control under this Acts/Regulations.
- SCDF: Fire Safety Act & Fire Safety (Petroleum and Flammable Materials) Regulations - This product is subject to the requirement of this Acts/Regulations.
- SPF: The Arms and Explosive Act, the Arms and Explosives (Explosives) Rules, and the Arms and Explosives (Explosive Precursors) Rules

- This product is not subject to the requirement of this Acts/Regulations.

# **16. OTHER INFORMATION**

Revision Date/Version No.: 08-02-2024 /3/3.5.5 History Previous Revision Date /Version No.: 17-01-2022 /3/3.4.4 Abbreviation ACGIH American Conference of Governmental Industrial Hygienists TLV Threshold limit value TWA Time-Weighted Average OSHA Occupational Safety and Health Administration PEL Permissible Exposure Limit LD50 Lethal Dose LC50 Median lethal concentration IARC International Agency for Research in Cancer

Disclaimer

To the best of our knowledge, the information contained herein is accurate. However, the information is provided without any representation or warranty, expressed or implied, regarding its accuracy or completeness. Since the conditions of handling, storage, use and disposal are beyond our control and may be beyond our knowledge, for this and other reasons, we make no guarantee of results and assume no liability for damages incurred by the use of this product. Please be reminded that all chemicals may present unknown health hazards and should be used with caution.