



SAFETY DATA SHEET

MSDS :NPLK-020

Version No: 002

Nippon Epoxy Floor Paint

Revision Date :30-08-2021

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product Name : **Nippon Epoxy Floor Paint**
Uses : Solvent based 2K floor paint for flooring
Supplier : Nippon Paint Lanka (Pvt) Ltd.,
Street Address : "Nippolac Towers", No. 69A, Buthgamuwa Road, Rajgiriya, Sri Lanka.
Telephone Number : +94 11-4600400
Fax : +94 11-4600409
E-mail Address : info@nipponpaint.com.lk

CONTACT POINT

Designation : Head Of Technical Support
Telephone Number : +94 77-2284058

2. HAZARDS IDENTIFICATION

GHS Classification:

Physical Hazard

Not classified as an physical hazard under GHS criteria

Flammable Hazard Category 3

Health Hazard

Skin irritation Category 2

Serious eye irritation Category 2

Skin sensitization Category 1

Environment Hazard

Not classified as an environmental hazard under GHS criteria

GHS Pictogram



Signal Word

Danger

Hazard statements

H226: Flammable liquid and vapour H315:

Causes skin irritation

H317: May cause an allergic skin reaction H319:

Causes serious eye irritation

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 P280:

Wear protective gloves/protective clothing/eye protection/face protection

Storage

P403+P235: Store in a well-ventilated place. Keep cool

Disposal

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

3. COMPOSITION / INFORMATION ON INGREDIENTS

Substances	CAS No.	%
Bisphenol-A type solid epoxy resin	25036-25-3	6-13
Epichlorohydrin-bisphenol A resin	025068-38-6	5-10
Methyl isobutyl ketone	108-10-1	4-9
Toluene	108-88-3	2-4
2-Methyl-1-propanol	78-83-1	1-2
Calcium oxide	1305-78-8	1-2
Substances determined to be non-hazardous	-	Balance
		100%

4. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	:	Liquid
Odour	:	Aromatic hydrocarbon odour
Odour threshold	:	Not available
pH	:	Not available
Melting point/freezing point	:	Not available
Initial boiling point and boiling range	:	Between 106 and 168
degC Flash point	:	23 degC
Evaporation rate	:	Not available
Flammability (solid, gas)	:	Not

applicable Lower flammability or explosive limit	:	1.1% by vol
Upper flammability or explosive limit	:	10.6% 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	:	> 244 degC
Decomposition temperature	:	Not available
Viscosity	:	102 - 114 KU

5. 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.

6. 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

7. 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

8. 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 INCOMPATIBILITIES

- 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.

9. EXPOSURE CONTROL AND PERSONAL

CONTROL PARAMETERS/OCCUPATIONAL LIMITS

Substances	ACGIH TLV-TWA		OSHA PEL-TWA	
	ppm	mg/m ³	ppm	mg/m ³
Bisphenol-A type solid epoxy resin	-	-	-	-
Epichlorohydrin-bisphenol A resin	-	-	-	-
Methyl isobutyl ketone	50	-	-	-
Toluene	-	188.00	-	-
2-Methyl-1-propanol	-	-	-	-
Calcium 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.

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 section 7)

POSSIBILITY OF HAZARDOUS REACTION

- 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 ingredients:

Acute Oral toxicity
Harmful if swallowed.

<u>Ingredient</u>	<u>Oral LD50(Rat),</u>
<u>mg/kg</u> Bisphenol-A epoxy resin	5250
Titanium dioxide	Data not available
Silicon dioxide	Data not available
Aluminium oxide	Data not available
Nonyl Phenol	1900
Xylene	5250
Talc	Data not available

Acute dermal/skin toxicity

<u>Ingredient</u>	<u>Dermal LD50 (Rabbit),</u>
<u>mg/kg</u> Bisphenol-A epoxy resin	Data not available
Titanium dioxide	Data not available
Silicon dioxide	Data not available
Aluminium oxide	Data not available
Nonyl Phenol	2140
Xylene	Data not available
Talc	Data not available

Acute inhalation toxicity

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.

<u>Ingredient</u>	<u>Inhalation Vapor LC50 (Rat),</u>
<u>mg/L/4hr</u> Bisphenol-A epoxy resin	Data not available
Titanium dioxide	Data not available
Silicon dioxide	Data not available
Aluminium oxide	Data not available
Nonyl Phenol	Data not available
Xylene	Data not available
Talc	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.

Carcinogenicit

Titanium Dioxide

The International Agency for Research on Cancer (IARC) has classified Titanium Dioxide as possibly carcinogenic to humans (Group 2B) based on inadequate evidence of carcinogenicity in humans and sufficient evidence of carcinogenicity in experimental animals

Crystalline Silica

The International Agency for Research on Cancer (IARC) has classified Crystalline Silica as probably carcinogenic to humans (Group 2A) based on limited evidence of carcinogenicity in humans and sufficient evidence of carcinogenicity in experimental animals.

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.

Aspiration 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 course.

13. DISPOSAL INFORMATION

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: Class 3

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: Class 3

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: Class 3

Packaging Group: III

15. REGULATORY INFORMATION

Applicable national regulations:

- Standards on Hazard communication for hazardous chemicals and dangerous goods
 - SS 586 : Part 1: 2014- Transport and storage of dangerous goods
 - SS 586 : Part 2: 2014- GHS of classification and labelling of chemicals- Singapore's adaptations
 - SS 586 : Part 3: 2008- Preparation of safety data sheets (SDS)
- 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

16. OTHER INFORMATION

Revision date: 04-Jan-2019

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

IACR 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.