



SAFETY DATA SHEET

MSDS :NPLK-033

Version No: 002

Nippolac Polyurethane Varnish

Revision Date :16-11-2019

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product Name : **Nippolac Polyurethane Varnish**
Uses : Air drying paint/lacquer product for interior use wooden
Supplier : Nippon Paint Lanka (Pvt) Ltd.,
Street Address : "Nippolac Towers", No. 69A, Buthgamuwa Road, Rajgiriya, Sri Lanka.
Telephone Number : +94 11-4356900
Facsimile : +94 11-4356909
E-mail Address : www.nipponpaint.com.lk

CONTACT POINT

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

2. HAZARDS IDENTIFICATION

GHS Classification:

Flammable Hazard Category 3

Health Hazard

Skin corrosion/irritation Category 2

Serious eye damage/irritation Category 2

Skin sensitization Category 1

Germ cell mutagenicity Category 1

Carcinogenicity Category 1

Specific target organ toxicity:

- Repeated exposure Category 1

Asphyxiation hazard Category 1

GHS Pictogram



Signal Word Danger

Hazard statements

H226: Flammable liquid and vapour

H304: May be fatal if swallowed and enters airways
H315: Causes skin irritation

H317: May cause an allergic skin reaction H319:
Causes serious eye irritation
H340: May cause genetic defects H350: May
cause cancer
H372: Causes damage to organs through prolonged or repeated exposure

Precautionary statements

P201: Obtain special instructions before use
P202: Do not handle until all safety precautions have been read and understood 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 P260:
Do not breathe dust/fume/gas/mist/ vapours/spray P261: Avoid
breathing dust/fume/gas/mist /vapours/spray P264: Wash hands
thoroughly after handling
P270: Do not eat, drink or smoke when using this product
P272: Contaminated work clothing should not be allowed out of the workplace P280: Wear
protective gloves/protective clothing/eye protection/face protection P281: Use personal
protective equipment as required

Response

P314: Get medical advice/attention if you feel unwell P321:
Specific treatment (see Section 4 of SDS) P331: Do NOT
induce vomiting
P362: Take off contaminated clothing and wash before reuse P363:
Wash contaminated clothing before reuse
P301+310: IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician P302+352: IF ON
SKIN: Wash with soap and water
P308+313: IF exposed or concerned: Get medical advice/attention P332+313: If
skin irritation occurs: Get medical advice/attention P333+313: If skin irritation or a
rash occurs: Get medical advice/attention P337+313: If eye irritation persists: 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

Storage

P405: Store locked up
P403+235: Store in a well ventilated place. Keep cool

Disposal

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.	%
Alkyd resin	-	26-57
Low boiling point hydrogen treated naptha	64742-82-1	17-38
Aliphatic hydrocarbon	68956-56-9	1-3
1,2,4-Trimethylbenzene	95-63-6	1-2
Substances determined to be non-hazardous	-	Balance 100%

4. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	: Semi Solid 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 90
and 200 °C Flash point	: 23 °C
Evaporation rate	: Not available
Flammability (solid, gas)	: Not applicable
Lower flammability or explosive limit	: 0.6 % by vol
Upper flammability or explosive limit	: 7 % 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	: > 515 °C
Decomposition temperature	: Not available
Viscosity	: 53 - 57 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.
- Avoid spreading burning liquid with water, isolate liquid.
- Do not allow run-off from fire fighting to enter drains or watercourses.

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
Alkyd resin	100	- 525.00	-	-
Low boiling point hydrogen treated naptha	-	-	-	-
Aliphatic hydrocarbon	- 25	-	- 25	- 123.00
1,2,4-Trimethylbenzene				

WEL = Workplace Exposure Limit.

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 substances:

Acute oral toxicity

Harmful if swallowed

<u>Substances</u>	<u>Oral LD50(Rat), mg/kg</u>
Alkyd resin	Data not available
Low boiling point hydrogen treated naphtha	Data
not available Aliphatic hydrocarbon	Data
not available	
1,2,4-Trimethylbenzene	5000

Acute dermal/skin toxicity

May be harmful if in contact with skin

<u>Substances</u>	<u>Dermal LD50 (Rabbit), mg/kg</u>
Alkyd resin	Data not available
Low boiling point hydrogen treated naphtha	Data
not available Aliphatic hydrocarbon	Data
not available	
1,2,4-Trimethylbenzene	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>Substances</u>	<u>Inhalation Vapor LC50 (Rat), mg/L/4hr</u>
Alkyd resin	Data not available
Low boiling point hydrogen treated naptha	Data
not available Aliphatic hydrocarbon	Data
not available	
1,2,4-Trimethylbenzene	18000

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 sensitization

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

No information available on the product

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 Eco toxicological test data available on the product itself. The product should not be allowed to enter drains or water courses.

Reproductive toxicity

No data available

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
 - 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: 04-Jan-2019

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
- 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.