# SAFETY DATA SHEET

SDS Number: SDS-70205 Version No: 003

Revision Date/Version No:16-03-2017 /3/2.1.1

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

| | |
|---|---|
| Product Name: | WEATHERBOND |
| Intended Use: | Water-Based Decorative Paint |
| Manufacturer: | Nippon Paint (S) Co. Pte Ltd<br>No. 1 First Lok Yang Road<br>Jurong Singapore 629728 |
| Emergency Phone Number: | (65) 6 265 5355 |
| Fax Numbers: | (65) 6 264 1603 |

## 2. HAZARDS IDENTIFICATION

**GHS Classification:**

Physical Hazard

Not classified as a physical hazard under GHS criteria

Health Hazard

Not classified as a health hazard under GHS criteria

Environmental Hazard

Not classified as an environmental hazard under GHS criteria

GHS Pictogram

None

Signal Word

None

Hazard statements

None

Precautionary statements

None

Response

None

Storage

None

Disposal

None

## 3. COMPOSITION / INFORMATION ON INGREDIENTS

This product does not contain any substances presenting to physical, health or environmental hazard

## 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**

-No data available

**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 |
| pH | : | Not available |
| Melting point/freezing point | : | Not available |
| Initial boiling point and boiling range | : | Between 100 and 255 °C |
| Flash point | : | 68 °C |
| Evaporation rate | : | Not available |
| Flammability (solid, gas) | : | Not applicable |
| Lower flammability or explosive limit | : | 2.6 % by vol |
| Upper flammability or explosive limit | : | 12.5 % 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 | : | Not available |
| Decomposition temperature | : | Not available |
| Viscosity | : | 86 - 90 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 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

**Acute dermal/skin toxicity**
May be harmful if in contact with skin

**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.

**Skin corrosion or irritation dasdsa**
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**

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

**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**

Not 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.

**SEA TRANSPORT**

Not classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport of Sea.

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

Not applicable

**AIR TRANSPORT**

Not classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by Air.

## 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
  - 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 not 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.: 16-03-2017 /3/2.1.1
History
Previous Revision Date /Version No.: 03-07-2015 /3/1.1.1

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.

# SAFETY DATA SHEET

SDS Number: SDS-70206 Version No: 003

Revision Date/Version No:16-03-2017 /3/2.1.1

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

| | |
|---|---|
| Product Name: | WEATHERBOND BASE 1 |
| Intended Use: | Water-Based Decorative Paint |
| Manufacturer: | Nippon Paint (S) Co. Pte Ltd<br>No. 1 First Lok Yang Road<br>Jurong Singapore 629728 |
| Emergency Phone Number: | (65) 6 265 5355 |
| Fax Numbers: | (65) 6 264 1603 |

## 2. HAZARDS IDENTIFICATION

**GHS Classification:**

Physical Hazard

Not classified as a physical hazard under GHS criteria

Health Hazard

Not classified as a health hazard under GHS criteria

Environmental Hazard

Not classified as an environmental hazard under GHS criteria

GHS Pictogram

None

Signal Word

None

Hazard statements

None

Precautionary statements

None

Response

None

Storage

None

Disposal

None

## 3. COMPOSITION / INFORMATION ON INGREDIENTS

This product does not contain any substances presenting to physical, health or environmental hazard

## 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**

-No data available

**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 |
| pH | : | Not available |
| Melting point/freezing point | : | Not available |
| Initial boiling point and boiling range | : | Between 100 and 255 °C |
| Flash point | : | 68 °C |
| Evaporation rate | : | Not available |
| Flammability (solid, gas) | : | Not applicable |
| Lower flammability or explosive limit | : | 2.6 % by vol |
| Upper flammability or explosive limit | : | 12.5 % 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 | : | Not available |
| Decomposition temperature | : | Not available |
| Viscosity | : | 86 - 90 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 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

**Acute dermal/skin toxicity**
May be harmful if in contact with skin

**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.

**Skin corrosion or irritation dasdsa**
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**

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

**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**

Not 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.

**SEA TRANSPORT**

Not classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport of Sea.

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

Not applicable

**AIR TRANSPORT**

Not classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by Air.

## 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
  - 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 not 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.: 16-03-2017 /3/2.1.1
History
Previous Revision Date /Version No.: 03-07-2015 /3/1.1.1

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.

# SAFETY DATA SHEET

SDS Number: SDS-70207 Version No: 003

Revision Date/Version No:16-03-2017 /3/2.1.1

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

| | |
|---|---|
| Product Name: | WEATHERBOND BASE 2 |
| Intended Use: | Water-Based Decorative Paint |
| Manufacturer: | Nippon Paint (S) Co. Pte Ltd<br>No. 1 First Lok Yang Road<br>Jurong Singapore 629728 |
| Emergency Phone Number: | (65) 6 265 5355 |
| Fax Numbers: | (65) 6 264 1603 |

## 2. HAZARDS IDENTIFICATION

**GHS Classification:**

Physical Hazard

Not classified as a physical hazard under GHS criteria

Health Hazard

Not classified as a health hazard under GHS criteria

Environmental Hazard

Not classified as an environmental hazard under GHS criteria

GHS Pictogram

None

Signal Word

None

Hazard statements

None

Precautionary statements

None

Response

None

Storage

None

Disposal

None

## 3. COMPOSITION / INFORMATION ON INGREDIENTS

This product does not contain any substances presenting to physical, health or environmental hazard

## 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**

-No data available

**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 |
| pH | : | Not available |
| Melting point/freezing point | : | Not available |
| Initial boiling point and boiling range | : | Between 100 and 255 °C |
| Flash point | : | 68 °C |
| Evaporation rate | : | Not available |
| Flammability (solid, gas) | : | Not applicable |
| Lower flammability or explosive limit | : | 2.6 % by vol |
| Upper flammability or explosive limit | : | 12.5 % 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 | : | Not available |
| Decomposition temperature | : | Not available |
| Viscosity | : | 88 - 92 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 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

**Acute dermal/skin toxicity**
May be harmful if in contact with skin

**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.

**Skin corrosion or irritation dasdsa**
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**

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

**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**

Not 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.

**SEA TRANSPORT**

Not classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport of Sea.

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

Not applicable

**AIR TRANSPORT**

Not classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by Air.

## 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
  - 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 not 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.: 16-03-2017 /3/2.1.1
History
Previous Revision Date /Version No.: 03-07-2015 /3/1.1.1

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.

# SAFETY DATA SHEET

SDS Number: SDS-70228 Version No: 003

Revision Date/Version No:16-03-2017 /3/2.1.1

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

| | |
|---|---|
| Product Name: | WEATHERBOND BASE 3 |
| Intended Use: | Water-Based Decorative Paint |
| Manufacturer: | Nippon Paint (S) Co. Pte Ltd<br>No. 1 First Lok Yang Road<br>Jurong Singapore 629728 |
| Emergency Phone Number: | (65) 6 265 5355 |
| Fax Numbers: | (65) 6 264 1603 |

## 2. HAZARDS IDENTIFICATION

**GHS Classification:**

Physical Hazard

Not classified as a physical hazard under GHS criteria

Health Hazard

Not classified as a health hazard under GHS criteria

Environmental Hazard

Not classified as an environmental hazard under GHS criteria

GHS Pictogram

None

Signal Word

None

Hazard statements

None

Precautionary statements

None

Response

None

Storage

None

Disposal

None

## 3. COMPOSITION / INFORMATION ON INGREDIENTS

This product does not contain any substances presenting to physical, health or environmental hazard

## 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**

-No data available

**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 |
| pH | : | Not available |
| Melting point/freezing point | : | Not available |
| Initial boiling point and boiling range | : | Between 100 and 255 °C |
| Flash point | : | 68 °C |
| Evaporation rate | : | Not available |
| Flammability (solid, gas) | : | Not applicable |
| Lower flammability or explosive limit | : | 2.6 % by vol |
| Upper flammability or explosive limit | : | 12.5 % 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 | : | Not available |
| Decomposition temperature | : | Not available |
| Viscosity | : | 90 - 94 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 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

**Acute dermal/skin toxicity**
May be harmful if in contact with skin

**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.

**Skin corrosion or irritation dasdsa**
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**

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

**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**

Not 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.

**SEA TRANSPORT**

Not classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport of Sea.

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

Not applicable

**AIR TRANSPORT**

Not classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by Air.

## 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
  - 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 not 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.: 16-03-2017 /3/2.1.1
History
Previous Revision Date /Version No.: 03-07-2015 /3/1.1.1

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.

# SAFETY DATA SHEET

SDS Number: SDS-70229 Version No: 003

Revision Date/Version No:16-03-2017 /3/2.1.1

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

| | |
|---|---|
| Product Name: | WEATHERBOND BASE 4 |
| Intended Use: | Water-Based Decorative Paint |
| Manufacturer: | Nippon Paint (S) Co. Pte Ltd<br>No. 1 First Lok Yang Road<br>Jurong Singapore 629728 |
| Emergency Phone Number: | (65) 6 265 5355 |
| Fax Numbers: | (65) 6 264 1603 |

## 2. HAZARDS IDENTIFICATION

**GHS Classification:**

Physical Hazard

Not classified as a physical hazard under GHS criteria

Health Hazard

Not classified as a health hazard under GHS criteria

Environmental Hazard

Not classified as an environmental hazard under GHS criteria

GHS Pictogram

None

Signal Word

None

Hazard statements

None

Precautionary statements

None

Response

None

Storage

None

Disposal

None

## 3. COMPOSITION / INFORMATION ON INGREDIENTS

This product does not contain any substances presenting to physical, health or environmental hazard

## 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**

-No data available

**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 |
| pH | : | Not available |
| Melting point/freezing point | : | Not available |
| Initial boiling point and boiling range | : | Between 100 and 255 °C |
| Flash point | : | 68 °C |
| Evaporation rate | : | Not available |
| Flammability (solid, gas) | : | Not applicable |
| Lower flammability or explosive limit | : | 2.6 % by vol |
| Upper flammability or explosive limit | : | 12.5 % 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 | : | Not available |
| Decomposition temperature | : | Not available |
| Viscosity | : | 96 - 100 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 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

**Acute dermal/skin toxicity**
May be harmful if in contact with skin

**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.

**Skin corrosion or irritation dasdsa**
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**
No information available on the product

**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**

Not 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.

**SEA TRANSPORT**

Not classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport of Sea.

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

Not applicable

**AIR TRANSPORT**

Not classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by Air.

## 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
  - 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 not 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.: 16-03-2017 /3/2.1.1
History
Previous Revision Date /Version No.: 03-07-2015 /3/1.1.1

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.

# SAFETY DATA SHEET

SDS Number: SDS-70230 Version No: 003

Revision Date/Version No:16-03-2017 /3/2.1.1

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

| | |
|---|---|
| Product Name: | WEATHERBOND BASE Y |
| Intended Use: | Water-Based Decorative Paint |
| Manufacturer: | Nippon Paint (S) Co. Pte Ltd<br>No. 1 First Lok Yang Road<br>Jurong Singapore 629728 |
| Emergency Phone Number: | (65) 6 265 5355 |
| Fax Numbers: | (65) 6 264 1603 |

## 2. HAZARDS IDENTIFICATION

**GHS Classification:**

Physical Hazard

Not classified as a physical hazard under GHS criteria

Health Hazard

Not classified as a health hazard under GHS criteria

Environmental Hazard

Not classified as an environmental hazard under GHS criteria

GHS Pictogram

None

Signal Word

None

Hazard statements

None

Precautionary statements

None

Response

None

Storage

None

Disposal

None

## 3. COMPOSITION / INFORMATION ON INGREDIENTS

This product does not contain any substances presenting to physical, health or environmental hazard

## 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**

-No data available

**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 |
| pH | : | Not available |
| Melting point/freezing point | : | Not available |
| Initial boiling point and boiling range | : | Between 100 and 255 °C |
| Flash point | : | 68 °C |
| Evaporation rate | : | Not available |
| Flammability (solid, gas) | : | Not applicable |
| Lower flammability or explosive limit | : | 2.6 % by vol |
| Upper flammability or explosive limit | : | 12.5 % 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 | : | Not available |
| Decomposition temperature | : | Not available |
| Viscosity | : | 97 - 103 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 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

**Acute dermal/skin toxicity**
May be harmful if in contact with skin

**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.

**Skin corrosion or irritation dasdsa**
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**

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

**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**

Not 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.

**SEA TRANSPORT**

Not classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport of Sea.

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

Not applicable

**AIR TRANSPORT**

Not classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by Air.

## 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
  - 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 not 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

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