

Safety Data Sheet

SECTION 1 : CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name : PALBOND WL35W REPLENISHING (PB-WL35WR)

| | |
|--|--|
| Manufacturer's Name: Nihon Parkerizing (M) Sdn. Bhd. | Emergency Telephone No.: 03-33410227,33410085,33410091 |
| Address: No. 10, Jalan Keluli 2, Kawasan Perindustrian Bukit Raja, 41050 Klang, Selangor. | Email: razi@nihonparker.com norzila@nihonparker.com |
| Description: | Date Revised : 28 February 2023 |

SECTION 2 : HAZARD IDENTIFICATION

GHS Classification

Physical hazards:

| | |
|---|-------------------------------|
| Explosives | : Not applicable |
| Flammable gases | : Not applicable |
| Flammable aerosols | : Not applicable |
| Oxidizing gases | : Not applicable |
| Gases under pressure | : Not applicable |
| Flammable liquids | : Classification not possible |
| Flammable solids | : Not applicable |
| Self-reactive substances and mixtures | : Not applicable |
| Pyrophoric liquids | : Classification not possible |
| Pyrophoric solids | : Not applicable |
| Self-heating substances and mixtures | : Classification not possible |
| Substances and mixtures, which in contact with water emit flammable gasses | : Not applicable |
| Oxidizing liquids | : Classification not possible |
| Oxidizing solids | : Not applicable |
| Organic peroxides | : Not applicable |
| Corrosive to metals | : Classification not possible |

Health hazard :

| | |
|--|------------------|
| Acute toxicity – Oral | : Not classified |
| Acute toxicity – Dermal | : Not classified |
| Acute toxicity – Inhalation (Gases) | : Not applicable |
| Acute toxicity – Inhalation (Vapours) | : Not classified |
| Acute toxicity – Inhalation (Dusts, Mists) | : Not classified |
| Skin Corrosion / Irritation | : Category 1 |
| Serious Eye Damage / Eye Irritation | : Category 1 |

| | |
|--|-------------------------------|
| Respiratory sensitization | : Category 1 |
| Skin sensitization | : Category 1 |
| Germ Cell Mutagenicity | : Not classified |
| Carcinogenicity | : Category 1 |
| Reproductive toxicity | : Not classified |
| Specific target organ toxicity following (single exposure) | : Classification not possible |
| Specific target organ toxicity following (repeated exposure) | : Classification not possible |
| Aspiration toxicity | : Classification not possible |

Environmental hazards:

| | |
|---|------------------|
| Hazardous to the aquatic environment acute hazard | : Not classified |
| Hazardous to the aquatic environment chronic hazard | : Category 3 |

GHS label elements:**Pictogram****Signal word** : Danger**Hazard Statements:**

H314: Causes severe skin burns and eye damage

H318: Causes serious eye damage

H334: May cause allergy or asthma symptoms or breathing difficulties if inhaled

H317: May cause allergic skin reaction

H350: May cause cancer

H412: Harmful to aquatic life with long lasting effects

Precautionary Statements**Prevention:**

P280: Wear protective gloves/ protective clothing/ eye protection/ face protection

P281: Use personal protective equipment as required

P201 Obtain special instructions before use.

P202: Do not handle until all safety precautions have been read and understood

P260 Do not breathe dust/fume/gas/mist/vapours/spray

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

P264 Wash hands, face thoroughly after handling.

P272 Contaminated work clothing should not be allowed out of the workplace.

P273: Avoid release to the environment

Response:

Immediately call a POISON CENTER or doctor/physician.

If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician.

If exposed or concerned: Get medical advice/attention

If skin irritation or rash occurs : Get medical advice/attention

If INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

If SWALLOWED: Rinse mouth. Do not induce vomiting.

If IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

If ON SKIN (OR HAIR): Wash with plenty of soap and water.

Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

Wash contaminated clothing before reuse.

Collect spillage.

Storage:

Store locked up.

Disposal:

Dispose of contents/container through a licensed disposal agent in accordance with local/regional/national/international regulations (to be specified).

Hazard information which do not fall under GHS classification:

Hazard Statements:

Harmful by ingestion.

May be harmful to human health by ingestion.

Precautionary Statements**Prevention:**

Do not eat, drink or smoke when using this product.

Wear mask, chemical-resistant gloves or protective clothing to avoid accidental ingestion, contact, and inhalation in accordance with regulation.

Response

In the case of accidental ingestion, contact or inhalation, take necessary steps such as to rinse mouth and wash the affected area.

Take additional step such as to get medical advice/attention, if necessary.

Storage:

Store locked up.

Store it in a place where is decided.

Disposal:

Dispose of contents/container through a licensed disposal agent in accordance with local/regional/national/international regulations (to be specified).

SECTION 3 : COMPOSITION / INFORMATION ON INGREDIENTS

Division of chemical substance/mixture : Mixture

Chemical name or generic name: PALBOND WL35W Replenishing (PB-WL35WR)

| Ingredient | CAS Number | Content (%) |
|--------------------------------|------------|-------------|
| Zinc dihydrogen phosphate | 13598-37-3 | 20 ~ 30 |
| Phosphoric acid | 7664-38-2 | 1 ~ 10 |
| Manganese dihydrogen phosphate | 18718-07-5 | 1 ~ 10 |
| Nickel nitrate | 13138-45-9 | 1 ~ 10 |
| Hydrosilicofluoric acid | 16961-83-4 | 1 |
| Water | 7732-18-5 | - |

SECTION 4 : FIRST AID MEASURES

Description of first aid measures:

| | |
|-------------------|---|
| INHALATION | <ul style="list-style-type: none"> - Remove victim to fresh air and keep at rest position comfortable for breathing. - If breathing is weak, irregular or has stopped, administer artificial respiration. - If the victim is vomiting, turn the head so that the airways are not blocked. - May irritate a throat. Do not induce vomiting. - Call a POISON CENTER or doctor/physician. |
| SKIN | <ul style="list-style-type: none"> - Wash with plenty of soap and water. - Wash the victim's skin with running water or shower. - Immediately call a POISON CENTER or doctor/physician. - Remove/Take off immediately all contaminated clothing. - Wash contaminated clothing before reuse. |

| | |
|-----------------------------------|---|
| EYES | <ul style="list-style-type: none"> - Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. - Call a POISON CENTER or doctor/physician. Get medical advice/attention immediately. |
| INGESTION | <ul style="list-style-type: none"> - Corrosive, DO NOT INDUCE VOMITING. Rinse mouth. - Call a POISON CENTER or doctor/physician. Get medical advice/attention immediately. - If the victim is vomiting, turn the head to the side so that the airways are not blocked. |
| PROTECTION FOR FIRST-AIDER | <ul style="list-style-type: none"> - Personal protective equipment described in Section 8: Exposure control/Personal protection. - Ventilated area, if gases, vapors, mists or dusts occurs. |

SECTION 5 : FIRE FIGHTING MEASURES

Suitable Extinguishing Media:

- This product is not combustible.

Specific Extinguishing Method:

- During a fire, highly toxic gases may be generated.
- Remove combustible materials from fire area.
- Move container from fire areas if possible to do so without hazard.
- Cool down container and the surrounding area by water, if container can't be moved.

Protection For Fire-Fighters:

- Avoid inhalation of combustion gas contains toxic gases.
- Fight a fire from windward to avoid inhalation of vapors and combustion gases.
- In firefighting, wear proper protective equipment (fire fighter protective clothing, respiratory protection) to avoid inhale and contact with the chemical.

SECTION 6 : ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures:

- Wear protective equipment regulated in Section 8: Exposure Control and Personal Protection to avoid contact to eyes or skin and inhalant gases, dust and fumes.
- Set up off-limits area to prevent secondary disaster.
- Use local exhaust to avoid inhalant gases, mist, vapors or dust for indoor work.

Environmental Precautions:

- Acute toxic and toxic to aquatic life with long lasting effect. Do not drain the product or rinsing water to natural water system.

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- In case of using waste water treatment equipment, call the administrator to avoid discharge the waste water involving the product.

Methods and Materials for Containment and Cleaning Up:

- Retrieve spilled material, using shovel or waste cotton
- Dike to contain spill in case of large spill.
- Retrieve spilled material, collect and store in suitable.
- Spilled materials and contaminated substances should be disposed as regulated.

Secondary Disaster Prevention Measures:

- Set-up off-limits area to prevent secondary disaster.
- Call the section relating safety, hygiene, environment, disaster prevention etc.
- Take proper measures.

Recovery, Neutralization and Disposal:

- Acidic substance. Use Soda ash, slaked lime to neutralize.
- Work carefully. In neutralization or dilution, heat may generate.
- In case of small spill, retrieve spilled material using absorbent such as sawdust, soil, sand, waste cotton.
- Dike to contain spill in case of large spill. After collect in suitable area, dispose as regulated.

SECTION 7 : HANDLING AND STORAGE

Technical Measures:

- Use corrosion resistant material for equipment
- Take necessary steps to avoid contact and/or overexposure, for instant protective facilities, protective equipment regulated in Section 8: Exposure Control and Personal Protection.
- Handle in a well-ventilated place.

Local Ventilation/Total Ventilation:

- Take necessary ventilation regulated in Section 8: Exposure Control and Personal Protection.

Precautionary Statements:

- Wear suitable Protective Equipment, gloves and eye/face protection to avoid contact with skin, clothing or mucous membrane.
 - Wash hand and faces after handling. Do not bring polluted protective equipment into the resting room.
 - Do not handle this material if you have had allergic reaction in the past.
 - Use local exhaust. Wear suitable protective equipment.
 - Wear suitable protective equipment and handle in a well-ventilated place.
-

Safe Handling Instructions:

- Avoid release to the environment.
- Acidic substance. Avoid contact to alkaline substances.
- Avoid rough handling such as toppling, dropping, exposing shock, dragging.
- Call attention to workers about hazard information by posting SDS.

Avoid Contact Storage:

- Refer to incompatible materials shown in Section 10 : Stability and Reactivity

Suitable Condition:

- Store locked up
- In every use, keep container tightly closed..

Packing Material:

- Do not transfer this chemical to a food container.
- Use product containers or a container having enough strength.

Incompatible Materials:

- Alkaline substances.

SECTION 8 : EXPOSURE CONTROLS AND PERSONAL PROTECTION
Protective equipment:

- Make available hand wash and face wash in work place. After handling, wash hands and face.
- Use local exhaust, push-pull ventilation system or general ventilation.
- In case that dust is included in exhaust gas, attach dust removal equipment to ventilation system.
- Use local exhaust, push- pull ventilation system or general ventilation to keep below specified level.

Occupational Exposure Limit (ACGIH):

| Ingredient | TWA | STEL | Ceiling |
|--------------------------------|--------------------------|--------------------|---------|
| Phosphoric acid | 1mg/m ³ | 3mg/m ³ | - |
| Manganese dihydrogen phosphate | 0.2(Mn)mg/m ³ | - | - |
| Nickel nitrate | 0.1(Ni)mg/m ³ | - | - |
| Hydrosilicofluoric acid | 2.5(F)mg/m ³ | - | - |

Occupational Exposure Limit (OSHA):

| Ingredient | PEL | Ceiling |
|--------------------------------|--------------------------------|---------|
| Phosphoric acid | 1mg/m ³ | - |
| Manganese dihydrogen phosphate | 5(Mn ceiling)mg/m ³ | |
| Nickel nitrate | 1(Ni)mg/m ³ | - |
| Hydrosilicofluoric acid | 2.5(F)mg/m ³ | |

Personal Protective Equipment**Respiratory Protection:**

- Wear proper respiratory protection.

Hand Protection:

- Wear chemical resistant gloves.

Eye Protection:

- Use proper eye protection.
- If necessary, use chemical goggles or face shield.

Skin and Body Protection:

- Wear proper protective clothing such as to avoid direct skin contact.
- Wear chemical resistant protective clothing.

Appropriate Hygiene Measures:

- Obtain special instruction before use.
- Do not handle until all safety precautions have been read and understood.
- Do not breath dust/fume/gas/mist/vapors/spray – if inhalable particles may occur during use.
- Avoid breathing dust/fume/gas/mist/vapors/spray
- Wash hands, face thoroughly after handling.
- Do not eat, drink or smoke when using this product.
- Contaminated work clothing should not be allowed out of the workplace.
- Furnish eye wash facilities, shower facilities, mouth wash instruments, and dressing room / laundry facilities.

SECTION 9 : PHYSICAL AND CHEMICAL PROPERTIES**Appearance**

Physical State : Liquid

Color : Green

Odour : No Information**pH** : 1**Melting Point/Freezing Point** : No Information**Initial Boiling Point and****Boiling Range** : No Information**Flash Point** : No Information**Auto-Ignition Temperature** : No Information**Upper/Lower Flammability****or Explosive Limits** : No Information**Vapour Pressure** : No Information**Vapour Density** : No Information**Evaporation Speed** : No Information**Specific Gravity(relative density)** : 1.5 (27°C)**Solubility in Water** : No Information**Dissolubility in Water** : Water Soluble Liquid**Solubility in Organic Solvent** : No Information**Dissolubility in Organic Solvent** : No Information**n-Octanol/Water****Partition Coefficient** : No Information**Decomposition Temperature** : No Information**SECTION 10 : STABILITY & REACTIVITY****Stability/Possibility of Hazardous Reaction:**

Stable under normal conditions.

Condition to Avoid:

No Information.

Incompatibility Materials:

No Information

Hazardous decomposition product:

No Information

SECTION 11 : TOXICOLOGICAL INFORMATION
Acute toxicity studies:

Acute toxicity studies are shown as below:

| | | | |
|---------------------------|---------------------|--------|----------------|
| Zinc dihydrogen phosphate | LD50(oral) | Rat | 1990 mg/kg |
| Zinc dihydrogen phosphate | LD50(oral) | Mouse | 1610 mg/kg |
| Phosphoric acid | LD50(oral) | Rat | 1530 mg/kg |
| Phosphoric acid | LD50(oral) | Rat | 1250 mg/kg |
| Phosphoric acid | LD50(dermal) | Rabbit | 2740 mg/kg |
| Phosphoric acid | LC50(dusts & mists) | Rat | >0.85 mg/L(1h) |
| Nickel compound | LD50(oral) | Rat | 1620 mg/kg |
| Hydrosilicofluoric acid | LD50(oral) | Rat | 430 mg/kg |

Health Hazard Category List 1 :

| Ingredients | Skin Corrosion/ Irritation | Serious Eye Damage/ Eye Irritating | Respiratory Sensitization | Skin Sensitization | Germ Cell Mutagenicity | Reproductive Toxicity |
|--------------------------------|----------------------------|------------------------------------|---------------------------|--------------------|------------------------|-----------------------|
| Zinc dihydrogen phosphate | X | X | X | X | X | X |
| Phosphoric acid | 1 | 1 | X | X | X | X |
| Manganese dihydrogen phosphate | X | X | X | X | X | X |
| Nickel nitrate | X | X | 1 | 1 | - | X |
| Hydrosilicofluoric acid | 1 | 1 | X | X | X | X |
| Water | X | X | X | X | X | X |

Health Hazard Category List 2:

| Ingredients | Specific Target Organ Toxicity-Single Exposure | | | Specific Target Organ Toxicity-Repeated Exposure | | Aspiration Toxicity |
|--------------------------------|--|---|------------------------------|--|--|---------------------|
| | Category 1 | Category 2 | Category 3 | Category 1 | Category 2 | |
| Zinc dihydrogen phosphate | X | X | X | X | X | X |
| Phosphoric acid | | | Respiratory Tract Irritation | X | X | X |
| Manganese dihydrogen phosphate | X | X | X | X | X | X |
| Nickel nitrate | X | X | X | X | X | X |
| Hydrofluoric acid | | Testes respiratory organs, digestive system, central nervous system, lung | | | Testes respiratory organs, tooth, lung, bone | |
| Water | X | X | X | X | X | X |

X : Classification not possible

- : Not classified

Carcinogenicity

| Ingredient | GHS Classification | IARC | NTP | EPA 1986 | EPA 1996 | EPA 2005 | ACGIH | EU Directive |
|--------------------------------|--------------------|------|-----|----------|----------|----------|-------|--------------|
| Zinc dihydrogen phosphate | X | | | | | | | |
| Phosphoric acid | X | | | | | | | |
| Manganese dihydrogen phosphate | X | | | | | | | |
| Nickel nitrate | 1A | 1 | K | | | | A4 | |
| Hydrofluoric acid | X | | | | | | A4 | |
| Water | X | | | | | | | |

SECTION 12 : ECOLOGICAL INFORMATION

Hazardous to the aquatic environment

Acute Toxicity

Nickel nitrate EC50(48h) Crustacea(*Moina macrocopa*) 1.435 mg/L

Ecotoxicity : No Information

Fish Toxicity : No Information

Effect on animal

and plants : No Information

Bioaccumulative

potential : No Information

Environmental Effect

Persistence and

degradability : No Information

Ozone Depleting

potential : No Information

Global Warming

potential : No Information

Mobility In Soil : No Information

Other Harmful

Effects : No Information

SECTION 13 : DISPOSAL CONSIDERATIONS

Residual Waste : Dispose of contents/container through a licensed disposal agent in accordance with local/regional/national/international regulations (to be specified).

Contaminated Container : Reuse containers after cleaning, dispose properly in accordance with related laws and local regulations.

and Contaminated Packaging Remove contents thoroughly from a container before disposal of it.

SECTION 14 : TRANSPORT INFORMATION

- Make sure no leak in the container. Load steadily to avoid load shifting such as falling, dropping and damaged.
- Follow the procedure specified in section 7 – Handling and Storage.
- Regulatory information with regard to the transportation of this substances is describe as below:
 - ❖ Land Transportation : Follow all regulations in the country or region.
 - ❖ Marine Transportation : Follow the procedure specified by IMDG CODE. Do not discharge into the sea area.

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- ❖ Air Transport : Follow the procedure specified by IATA
REGULATION.

SECTION 15 : REGULATORY INFORMATION

- Ensure this material in compliance with federal requirements and ensure conformity to local regulations.

SECTION 16 : ADDITIONAL INFORMATION

Other Precautions:

For industrial use only.

USERS RESPONSIBILITY:

This product safety data sheet provides health and safety information. The product is to be used in applications consistent with our product literature. Individuals handling this product should be informed of the recommended safety precautions and should have access to this information. For any other uses, exposures should be evaluated so that appropriate handling practices and training programs can be established to ensure safe workplace operations. Please consult your local sales representative for any further information.

SECRECY OBLIGATION:

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