**MATERIAL SAFETY DATA SHEET**

1. **PRODUCT AND COMPANY IDENTIFICATION**

Product name: Nax 2K Putty Fast Dry  
Intended use: Putty  
Manufacture/Suppliers  
- Company name: NIPPON PAINT(Thailand) CO., LTD  
- Address: 101 MOO 3 SOI SUKSAWAT 76, SUKSAWAT ROAD, T.BANGCHAK A.PRAPRADAENG, SAMUTPRAKARN 10130  
- Telephone No.: +66(0)2463-0032  
- Facsimile No.: +66(0)2463-2214

2. **COMPOSITION / INFORMATION ON INGREDIENTS**

Hazardous components:

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS No.</th>
<th>Concentration (%)</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Styrene</td>
<td>100-42-5</td>
<td>10 - 15</td>
<td>R10</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Xn;R20</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Xi;R36/38</td>
</tr>
</tbody>
</table>

3. **HAZARDS IDENTIFICATION**

Classification
- Flammable
- Harmful: Harmful by inhalation
- Irritant: Irritating to eyes and skin

4. **FIRST-AID MEASURES**

- General information:
  - Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.
- After inhalation:
  - Supply fresh air  If required, provide artificial respiration  Keep patient warm. Consult doctor if symptoms persist.
  - In case of unconsciousness place patient stably in side position for transportation.
- After skin contact: Immediately wash with water and soap and rinse thoroughly.
- After eye contact:
  - Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
- After swallowing: If symptoms persist consult doctor.
5. FIRE-FIGHTING MEASURES

- Suitable extinguishing agents: CO2, sand, extinguishing powder. Do not use water.
- For safety reasons unsuitable extinguishing agents: Water with full jet
- Protective equipment: Mouth respiratory protective device.

6. ACCIDENTAL RELEASE MEASURES

- Person-related safety precautions:
  Wear protective equipment. Keep unprotected persons away.
- Measured for environmental protection:
  Do not allow product to reach sewage system or any water course.
  Inform respective authorities in case of seepage into water course or sewage system.
  Do not allow to enter sewers/surface or ground water.
- Measures for cleaning/collecting:
  Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
  Dispose contaminated material as waste according to Item 13.
  Ensure adequate ventilation.
  Do not flush with water or aqueous cleansing agents

7. HANDLING AND STORAGE

- Handling:
- Information for safe handling:
  Ensure good ventilation/exhaustion at the workplace.
  Prevent formation of aerosols.
- Information about fire-and explosion protection:
  Keep ignition sources away - Do not smoke
Protect against electrostatic charges

Storage:
Requirements to be met by storerooms and receptacles; No special requirements.
Information about storage in one common storage facility; Not required.
Further information about storage conditions; Keep container tightly scaled.
8. EXPOSURE CONTROL / PERSONAL PROTECTION

- Additional information about design or technical facilities: No further date; see item 7.

- Ingredients with limit values that require monitoring at the workplace:

100 - 42-5 styrene

WEL  Short-term value: 1080 mg/m; 250 ppm

            Long-term value: 430 mg/m; 100 ppm

- Additional information: The lists valid during the making were used as basis.

- Personal protective equipment:

- General protective and hygienic measures:
  - Keep away from foodstuffs, beverages and feed,
  - Immediately remove all soiled and contaminated clothing
  - Wash hands before breaks and at the end of work
  - Avoid contact with the eyes and skin.

- Respiratory protection:
  - In case of brief exposure or low pollution use respiratory filter device In case of intensive or longer exposure use self-contained respiratory protective device

- Protection of hands:

  Protective gloves

  The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

  Due to missing tests no recommendation to the glove material can be given for the product/
  the preparation the chemical mixture.

  Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

  - Material of gloves

  The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

  - Penetration time of glove material

  The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.

- Eye protection:

  Tightly sealed goggles
9. PHYSICAL AND CHEMICAL PROPERTIES

- General Information
  Form: Fluid
  Colour: According to product specification
  Odour: Characteristic

- Change in condition
  Melting point/Melting range: Undetermined.
  Boiling point/Boiling range: 145°C
- Flash point: 31°C
- Ignition temperature: 480.0°C
- Self-igniting: Product is not self-igniting.
- Danger of explosion: Product is not explosive. However formation of explosive air/vapour mixtures are possible.

- Explosion limits:
  Lower: 1.2 Vol %
  Upper: 8.9 Vol %
- Vapour pressure at 20°C: 6.0 hPa
- Density at 20°C: 1.64900 g/cm³
- Solubility in / Miscibility with water: Not miscible or difficult to mix.
- Solvent content:
  Organic solvents: 14.4%
  VOC (EC): 237.1 g/l
- Solids content (volume): 85.2%
- The content of total organic carbon: 0.2%

10. STABILITY AND REACTIVITY

- Thermal decomposition / conditions to be avoided:
  No decomposition if used according to specifications.
- Dangerous reactions No dangerous reactions known.
- Dangerous decomposition products: No dangerous decomposition products known.
11. TOXICOLOGICAL INFORMATION

- Acute toxicity:
- LD/LC50 values relevant for classification:

<table>
<thead>
<tr>
<th>Substance</th>
<th>LD50/LC50</th>
</tr>
</thead>
<tbody>
<tr>
<td>100-42-5 styrene</td>
<td>Oral: 500 mg/kg (rat) Inhalative: 24 mg/l (rat)</td>
</tr>
<tr>
<td>13463-67-7 titanium dioxide</td>
<td>Oral: &gt;20000 mg/kg (rat) Dermal: &gt;10000 mg/kg (rabbit) Inhalative: &gt;6.82 mg/l (rat)</td>
</tr>
</tbody>
</table>

- Primary irritant effect:
- on the skin: Irritant to skin and mucous membranes.
- on the eye: Irritating effect.
- Sensitization: No sensitizing effects known.

- Additional toxicological information:
  The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:
  - Harmful
  - Irritant

12. ECOLOGICAL INFORMATION

- General notes:
  Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water
  Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

13. DISPOSAL CONSIDERATIONS

- Product:
- Recommendation
  Must not be disposed together with household garbage. Do not allow product to reach sewage system.

- Uncleaned packaging:
- Recommendation: Disposal must be made according to official regulations.

14. TRANSPORT INFORMATION

- Land transport ADR/RID (cross-border)
- ADR/RID class: 3 (F1) Flammable liquids.
- Danger code (Kemler): 30
- UN-Number: 1263
- Packaging group: III
15. REGULATORY INFORMATION

- Labelling according to EU guidelines:
  The product has been classified and marked in accordance with EU Directives / Ordinance on Hazardous Materials.

- Code letter and hazard designation of product:
  Xn Harmful

- Hazard-determining components of labelling:
  styrene

- Risk phrases:
  10 Flammable.
  20 Harmful by inhalation.
  36/38 Irritating to eyes and skin

- Safety phrases:
  9 Keep container in a well-ventilated place
  23 Do not breathe gas/fumes/vapour/spray (appropriate wording to be specified by the manufacturer)
  26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
  29 Do not empty into drains.
  36/37 Wear suitable protective clothing and gloves.
  51 Use only in well-ventilated areas.
  60 This material and its container must be disposed of as hazardous waste.

16. OTHER INFORMATION

This information is based on our current knowledge. However, this shall not constitute a guarantee for any specific product features and not establish a legally valid contractual relationship.