1. IDENTIFICATION OF SUBSTANCE & THE COMPANY

CHEMICAL NAME: Polyhexamethylene Adipamide 66 (NYLON66)
COMPANY IDENTIFICATION: NAN YA PLASTICS CORPORATION PLASTICS 4TH DIVISION ENGINEERING PLASTICS DEPARTMENT
ADDRESS: 201, TUNG HWA N. ROAD, TAIPEI, TAIWAN
FAX: 886-2-27138248
TELEPHONE NUMBER: 886-2-27122211-5814

2. COMPOSITION / INFORMATION ON INGREDIENTS

SUBSTANCE/PREPARATION: Preparation
CHEMICAL NAME: Polyhexamethylene Adipamide 66 (NYLON66)
SYNONYMS: Polyhexamethylene Adipamide 66 (NYLON66)

<table>
<thead>
<tr>
<th>Component</th>
<th>Content (%)</th>
<th>CAS No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>NYLON66</td>
<td>30–55</td>
<td>32131-17-2</td>
</tr>
<tr>
<td>NYLON6</td>
<td>0–25</td>
<td>25038-54-4</td>
</tr>
<tr>
<td>Lubricant</td>
<td>0.2–2</td>
<td>557-05-1</td>
</tr>
<tr>
<td>Flame retardant</td>
<td>5–25</td>
<td>88497-56-7</td>
</tr>
<tr>
<td>Synergist</td>
<td>2–20</td>
<td>1309–64–4</td>
</tr>
<tr>
<td>Short glassfibers</td>
<td>22–28</td>
<td>65997-17-3</td>
</tr>
</tbody>
</table>

3. HAZARDS IDENTIFICATION

PHYSICAL AND CHEMICAL HAZARDS: Not applicable
HUMAN HEALTH EFFECTS: Not applicable
ENVIRONMENTAL EFFECTS: Not applicable
PHYSICAL AND CHEMICAL HAZARDS: It is inflammable substance and combustible if any igniting source is existent. Neither dangerous reaction, fire nor explosion can be caused under normal condition.

4. FIRST-AID MEASURES

INGESTION: Help to vomit as mush as possible. If sick feeling continues, and ask a physician for advice.
INHALATION: When a gas generated from the molten polymer, especially fume
generated during combustion or heat, has been inhaled, remove fresh air without delay and wait until the victim is recovered. If sick felling continues, ask a physician for advice.

SKIN CONTACT : If molten polymer contacts skin, cool rapidly with cold water. Do not attempt to peel polymer from skin. Obtain medical attention for thermal burn.

EYES CONTACT : If polymer and a gas generated from the molten polymer contacts eyes, rapidly flushing eyes with running water for 15 mins.

5. FIRE-FIGHTING MEASURES

EXTINGUISHING MEDIA : Water, form fire-extinguishing agent, power fire-extinguishing agent, and carbon dioxide gas.

SPECIFIC METHODS : Extinguish the fire with water. A method of extinguish an ordinary fire may be applied. Do not apply water directly to processing machines.

SPECIFIC HAZARDS : Incomplete combustion leads to deneration of toxic gases such as carbon monooxid or tereahydrofuran, in addition to carbonic acid gas and water.

SPECIAL EQUIPMENT FOR THE PROTECTION OF FIREFIGHTERS :

In case the fire gained force, use a gas mask or other protective equipment.

6. ACCIDENTAL LEAKAGE MEASURES

PERSONAL PRECAUTIONS : When pellets were spilled on the road or floor, wipe them off with a besom or cleaner not to cause slipping

ENVIRONMENTAL PRECAUSION : Handle the spillage in accordance with provisions given in the” Resin pellet spillage preventive manual”, in order to prevent intakes by marine animals and birds.

7. HANDLING AND STORAGE

HANDLING1 : This resin in a pellet form will neither ignite nor explode at room temperatures.

HANDLING2 : For molding work, effective means for local exhaust are required to discharge gases generated by melt processing.

HANDLING3 : Avoid inhaling of gases generated in molding work. Do not directly touch
resin of high temperature.

STORAGE: Keep the substance away from any fire or heat sources for the sake of safe storage.

RECOMMENDED PACKAGING MATERIALS: No information.

8. EXPOSURE CONTROL/PERSONAL PROTECTION

CONTROL CONCNRTRANION: None at present
OERMISSIBLE CONCRNTRATION: Max. permissible concentration of inactive power 15mg/m³ -ditto-(Aspiration)5mg/m³. Exposure limit of the power TWA 10 mg/m³.

ENGINEERING MEASURE: When handling dust: Use total encloses containers resisting dust explosion. When heat melted in molding: Effect local ventilation must be provided

PERSONAL PROTECTIVE EQUIPMENT
EYE PROTECTION: Wear protective glasses or goggles.
RESPIRATORY PROTECTION: Wear a dust-proof mask.
HAND PROTECTION: Wear heat-resisting gloves against burns, when handling molten polymer.
SKIN & BODY PROTECTION: Wear long sleeve clothes against burns, when handling molten polymer.

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: Pellet
BOILING POINT: Not applicable
VAPOUR PRESSURE: Not applicable
VOLATILITY: Not applicable
SUBLIMATION: None
MELTING POINT: 255~265°C
DENSITY: 1.53~1.57
SOLUBILITY: Insoluble in water
FLASH POINT: Not applicable
IGNITION POINT: 400°C or higher
EXPLOSION PROPERTY: Not applicable
INFLAMMABILITY: None
OXIDIZABILITY: None
SELF-REACTION: None
DUST EXPLOSIVENESS
10. STABILITY AND REACTIVITY

STABILITY : Stable for normal storage or handling.

REACTIVITY : During molding, small amount of hazardous gases may be released. These may be irritating to the eyes, upper respiratory tract and lungs.

11. TOXICOLOGICAL INFORMATION

SKIN CORROSIVE PROPERTIES : No finding

SENSITIZING & IRRITANT EFFECTS : Gas generated in drying or melting is irritating eyes and skins.

ACUTE TOXICITY (LD50) : No finding

SUBSTANCE TOXICITY : No finding

CHRONIC TOXICITY : No finding

CARCINOGENICITY : No finding

MUTAGENICITY : No finding

PRODUCTIVE TOXICITY : No finding

TERATOGENICITY : No finding

OTHERS : No finding in this date sheet means that will be no hazard in general, but proving date available at the time of reporting.

OTHER CAUTIONS : With regard to dust, the maximum permissible concentration and limits are fixed by OSHA and AGGIH.

12. ECOLOGICAL INFORMATION

BIODEGRADABILITY : Not applicable

BIOACCUMULATION : Not applicable

FISH TOXICITY : Not applicable

OTHERS : Handle the spillage in accordance with provisions given in the”Resin pellet spillage preventive manual”, in order to prevent intakes by marine animals and birds.
13. DISPOSAL CONSIDERATION
   WATER FORM RESIDUES : This is designated as waste plastics among industrial wastes by the Wastes Disposal Law. Disposal waste pellets through licensed wastes handlers or local autonomous bodies if they are handling wastes disposal.

14. TRANSPORT CONSIDERATION
   UNCLASSIFICATION NUMBER : Not applicable
   OTHER CAUTIONS : Handle with care as not to give damages to containers or not to be subjected to wetting.

15. REGULATORY INFORMATION
   WASTE DISPOSAL LAW : Waste plastics among industrial wastes.
   LAW CONCERNING REPORTING : ----
   INDUSTRIAL SAFETY AND HEALTH LAW : ----

16. OTHER INFORMATION
   HANDLING OF THE DETAILS GIVEN ABOVE :
   The information in this Material Safety Data Sheet relates only to the specific material(s) designated herein and does not relate to use in combination with any other material or in any process.
   WHERE TO CALL FOR FURTHER INFORMATION :
   NAN YA PLASTICS CORPORATION PLASTICS 4TH DIVISION
   ENGINEERING PLASTICS DEPARTMENT
   Tel : 886-2-27122211-5814