MATERIAL SAFETY DATA SHEET

Product Name: PIBSA1000
Product description: PIBSA1000

1. COMPANY IDENTIFICATION

Korkut Reis Neighborhood,
Lale Street, Number: 13/7
Sihhiye, Cankaya Ankara Turkey
TURKEY TEL: +90-555-188-18-77

2. HEALTH HAZARD INFORMATION

GHS Classification:
This product is not hazardous under the criteria of U.S. Occupational Safety and Health

Potential Health Effects:
Eye: Dust and process vapors may irritate eyes.
Skin: Exposure to molten resin may cause thermal burns.
Inhalation: Dust and process vapors may cause respiratory tract irritation.
Ingestion: Not Applicable

3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name: Polyisobutylene Succinic Anhydride

4. FIRST-AID MEASURES

Eye Contact:
When it enters the eyes, if the eyes are rubbed, it may cause irritation or injure the
cornea. Thus, wash with water without rubbing. Remove contact lenses immediately. In
case of any abnormalities, receive the treatment of a physician.
Skin Contact:
Wash with water, if condensates of gas generated from the substance molten at high temperature comes into contact with the skin, wash well with soapy water.

Inhalation:
Judging from the shape, it is unlikely that the pellets will be inhaled. In case lots of fumes generated from high temperature molten resins are inhaled, move to a place having fresh air. In case of coughs or difficulty in respiration, receive the treatment of a physician.

5. FIRE-FIGHTING MEASURES

Extinguishing Measures:
At the time of fire, high heat as well as gases containing dense black smoke, carbon dioxide, carbon monoxide, nitrogen oxides, etc. are generated. At the time of fire-fighting, wear proper protective clothing and respirators.

Extinguishing Media:
Water, water spray, and various kinds of fire-extinguisher may be used.

6. ACCIDENTAL RELEASE MEASURES

In case it is spilled on the road or floor, there is danger of slipping and falling. Thus, collect the spilled pellets and dispose of them.
If it is accidentally released, it may cause environmental contamination, so immediately collect all that have been released.

7. HANDLING AND STORAGE

Handling:
The gas generated at the time of processing may irritate the respiratory organs and skin, and when inhaled in large amount, vomiting and headaches may occur in certain individuals. Thus, avoid inhalation of such gases. In the case of mechanical processing (cutting, sanding, etc.), the fine dust generated by crushing may cause dust explosion by the static electricity and electrical sparks that are generated. Thus, aim at keeping the work place clean so that dust will not accumulate.

Storage:
Store in a place which is not exposed to the direct rays of the sun, and keep away from heat or ignition sources.
8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure controls:
The use of local exhaust ventilation is recommended to control process emissions near the source. Laboratory samples should be stored and handled in a lab hood. Provide mechanical ventilation of confined spaces.

Personal protection:
For open systems where contact is likely, wear safety glasses, chemical resistant gloves and dressed in working uniforms and rubber boots. Where concentrations in air may exceed the limits given in this section and engineering, work practice or other means of exposure reduction are not adequate. Approved respirators may be necessary to prevent overexposure by inhalation.

Workplace exposure guidelines:
Due to the oil-based components of this mixture, the concentrations of the oil mist are recommended to be controlled at 5mg/m³ or lower.

9. PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Item</th>
<th>QUALITY INDEX</th>
<th>RESULT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Clear, amber, viscous liquid</td>
<td></td>
</tr>
<tr>
<td>PIBSA production process</td>
<td>thermal</td>
<td></td>
</tr>
<tr>
<td>PIBSA molecular weight</td>
<td>1000</td>
<td>1000</td>
</tr>
<tr>
<td>PIBSA effective components/concentration</td>
<td>78%</td>
<td>78%</td>
</tr>
<tr>
<td>Viscosity @100C</td>
<td>150-170</td>
<td>166.85</td>
</tr>
</tbody>
</table>

10. STABILITY AND REACTIVITY

Stability: stable
Conditions to avoid instability: none
Hazardous polymerization: will not occur
Conditions to avoid hazardous polymerization: not applicable
Materials and conditions to avoid incompatibility: strong oxidizing agents
Hazardous decomposition products: none

11. TOXICOLOGICAL INFORMATION

Skin Corrosiveness: None
Irritability (Skin, Eyes): There is physical irritability.
Allergenic and Sensitizing Effects: None
Acute Toxicity (Includes 50% Lethal Dose):
  Oral LD$_{50}$ (Rat) $> 5g/kg$ (Assumed Value)
Sub-Acute Toxicity: No Information
Chronic Toxicity: No Information
Carcinogenic Effects: No Information
Mutagenic Effects: No Information
Effects on the Reproductives System: No Information
Teratogenic Effects: No Information
Others (Includes generation of toxic gases by reaction with water, etc.)

12. ECOLOGICAL INFORMATION

Biodegradability: Not Biodegradable
Bioaccumulation: No Information
Fish Toxicity: No information
Others: In order to prevent the marine animals and birds from ingesting it, it just not be abandoned or dumped in any ocean or water area.

13. DISPOSAL CONSIDERATIONS

It shall be handled in accordance with the laws, rules, and ordinances related to the disposal of waste matters.

14. TRANSPORT INFORMATION

Avoid wetting or rough handling so that the package will not be damaged. In case the drums are damaged and the pellets are scattered, pay attention so that no one will slip and fall. All of the materials that have spilled shall be rapidly collected.

15. REGULATORY INFORMATION
Safety Control Regulations of Dangerous Chemical Articles (Decree No. 344 of State Council), stipulates the pertinent regulations on safety production, usage, storage, transportation, loading and discharging of hazardous chemicals.

16. OTHER INFORMATION


The information described herein was prepared on the basis of the materials, information, and data available at the present time, and the above information may be revised by new knowledge. The precautionary items were based on ordinary handling. In case of special handling, safety measures in compliance with the application and usage shall be executed. The above was given as information, and no guarantee, express or implied, is made. Final determination of safety and suitability of any material is the sole responsibility of the keeper and user. All materials may present unknown hazards, and therefore should be handled with adequate caution. Although certain hazards are described herein, they may not be the only hazards in relation to the products.