MATERIAL SAFETY DATA SHEET

Section 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: SIBSTAR (103T-X)
SYNONYMS: Polystyrene-Isobutylene Copolymer
CHEMICAL FAMILY: Block Copolymer

COMPANY: Kaneka Corporation
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Performance Materials Research Laboratories
Shigemi Matsumoto

Section 2. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>COMPONENT</th>
<th>CAS. NO.</th>
<th>CONCENTRATION (wt%)</th>
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<tbody>
<tr>
<td>Styrene Isobutylene Copolymer</td>
<td>Trade Secret</td>
<td>&gt; 95</td>
</tr>
<tr>
<td>Antioxidant/Stabilizer</td>
<td>Trade Secret</td>
<td>&lt; 5</td>
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Section 3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW
White Crumb or Uneven Shaped Small Particle. Slightly odor
In limited circumstances dust may form explosive mixtures in air, minimize dust generation.(See Section 5)
If heated, fumes irritating to eyes and respiratory tract may develop.

POTENTIAL HEALTH EFFECTS
May cause irritation to eyes, skin and respiratory tract.
Avoid contact with eyes.
Observe good personal hygiene practices.

EYE
As with any solid, may cause mechanical irritation, eyes to tear.
Vapors from heated product may cause irritation.

SKIN
Possible, but unlikely, irritation and/or dermatitis.

INGESTION
Ingestion of large quantities may cause temporary stomach and abdominal pain, nausea and vomiting, diarrhea, convulsions.

INHALATION
Treat as nuisance dust.
Odorous fumes from normal processing may result in temporary nausea, headache and dizziness.
See Section 8 for exposure limit information.

**MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE**
No applicable information available.

**POTENTIAL ENVIRONMENTAL EFFECTS**
May be hazardous to aquatic life if products is released to open waters. Carefully vacuum or sweep up material and place in suitable container for disposal. Avoid creating a dusty atmosphere. Dampen spills with water to reduce dust.

**Section 4. FIRST AID MEASURES**

**FIRST AID PROCEDURES**
Obtain medical attention.

**EYE**
Immediately flush eyes with running water for at least 15 minutes. Contact physician for further instruction if irritation persists.

**SKIN**
If skin irritation occurs, remove contaminated clothing and shoes and flush affected area with water, then soap and water. Contact physician if irritation persists.

**INGESTION**
Induce vomiting only as directed by medical personnel.

**INHALATION**
If over exposure occurs, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.

**NOTE TO PHYSICIANS**
No additional, applicable information available.

**Section 5. FIRE FIGHTING MEASURES**

**FLASH POINT:** None

**METHOD:** Seta Method

**AUTOIGNITION TEMPERATURE:** Not applicable

**FLAMMABLE LIMITS:** Not applicable

**EXTINGUISHING MEDIA:** Water spray, foam or ABC dry chemicals

**FLAMMABLE PROPERTIES**
In solid form, material is combustible and burns with intense heat,

**FIREFIGHTING INSTRUCTIONS**
Avoid scattering burning material or creating dust hazard with water stream. A solid stream of water could create airborne dust and then possibly cause a dust explosion. Avoid eye and skin contact.
Do not breathe fumes or irritating to the respirator tract may form. These vapors may contain various component monomers.
Use water spray to keep containers cool and control heat.
Firefighting equipment should be thoroughly decontaminated after use.
HAZARDOUS COMBUSTION
Irritating fumes may develop when product is heated. These fumes may contain monomers.

UNUSUAL FIRE AND EXPLOSION HAZARDS
Dust can form explosive mixtures in the air.

Section 6. ACCIDENTAL RELEASE MEASURES

SPILL RESPONSE
May be hazardous to aquatic life if released to open waters. Carefully vacuum or sweep up material and place in a suitable container for disposal as solid waste.

PERSONAL PROTECTION
Appropriate protective equipment must be worn when handling a spill of this material. See Section 8 for recommendations. If exposed to material during clean-up operations, see Section 4 for actions to follow.

PROCEDURES
Floor may be slippery, use care to avoid falling. Eliminate all ignition sources. Ventilate the spill area without creating dusty conditions. Avoid breathing dust. Dampen spilled material with water to minimize dust. Transfer spilled material to containers suitable for recovery or disposal.

Section 7. HANDLING AND STORAGE

HANDLING
When transferring, avoid creating dust. Minimize chance of static spark; ground all equipment. Systems must be designed to safely handle and convey a material capable of a dust explosion. Avoid contact with eyes, skin and clothing. Wash thoroughly after handling. Use adequate ventilation. Avoid breathing dust. Processing vapors from heating the material may contain monomers. Emptied container retains product residue. Observe all label safeguards until container is cleaned, reconditioned or destroyed. Do not spill into public water systems or waterways.

STORAGE
Store in original container in cool, dry area. Keep containers closed. Do not store near high temperature, boilers, heaters, hot pipes, flames or oxidizing agents. Keep area ventilated. Since material can burn, consider limiting indoor storage to areas equipped with appropriate automatic sprinkler systems. Improper storage conditions may shorten safe storage time. Do not store in direct sunlight.
Section 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS
During processing operation which involves heating, ventilate area thoroughly to avoid exposure to vapors that may occur. These vapors may contain component monomers of material and exposure is to be avoided.

PERSONAL PROTECTIVE EQUIPMENT
RESPIRATORY
Use dust respirator in dusty conditions.

SKIN
If skin irritation results, nitrile rubber or neoprene gloves will prevent further skin contact.
Wash skin thoroughly after handling.

EYE
It is recommended that contact lenses not be worn when working with this product due to the potential for eye irritation from course product.
Have eye flushing equipment available in vicinity.

Section 9. PHYSICAL AND CHEMICAL PROPERTIES

pH: Not applicable
SPECIFIC GRAVITY: 0.96 (Water=1)
BOILING POINT(°C): Not applicable
VAPOR PRESSURE: Not applicable
FREEZING/MELTING POINT(°C): Not applicable
PERCENT VOLATILE: 3.0% maximum
VAPOR DENSITY (air=1): Not applicable
PHYSICAL STATE: Solid
SOLUBILITY IN WATER: insoluble in water
APPEARANCE AND ODOR: White crumb or uneven shaped small particle with mild odor
SEE SECTION 5: for additional properties

Section 10. STABILITY AND REACTIVITY

STABILITY
Stable under specified conditions. (See Section 7)

HAZARDOUS POLYMERIZATION
Will not occur

INCOMPATIBILITY
Avoid contact with acids, alkaliies and strong oxidizing agents.

HAZARDOUS DECOMPOSITION PRODUCTS
Thermal decomposition produces carbon monoxide, carbon dioxide and various oxidized and non-oxidized hydrocarbons.
CONDITIONS TO AVOID
See Section 7, Handling and Storage

Section 11. TOXICOLOGICAL INFORMATION

ACUTE TOXICITY
No data is available on this polymer.

Section 12. ECOLOGICAL INFORMATION

No applicable information available

Section 13. DISPOSAL CONSIDERATIONS

Recover, reclaim or recycle when practical. Dispose of material as solid waste in suitable closed container. Federal, State and Local regulations should be observed when disposing.

Section 14. TRANSPORT INFORMATION

US DOT HAZARD CLASS
Non-regulated

Section 15. REGULATORY INFORMATION

TSCA
All components of this product are listed on U.S. EPA Toxic Substances Control Act (TSCA) Inventory

Section 16. OTHER INFORMATION

DISCLAIMER

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