MATERIAL SAFETY DATA SHEET (MSDS)

1. Manufacturer
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   Date Prepared: August, 9, 2000

2. Product Information
   Product Code No.: 
   Product Name: aquaSAVE-53za

3. Hazardous Ingredients / Identity Information
   Component and Concentration of Hazardous Substance

<table>
<thead>
<tr>
<th>No.</th>
<th>Components Name</th>
<th>Qt.(%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1)</td>
<td>Poly(aniline sulfonic acid)</td>
<td>0~5</td>
</tr>
<tr>
<td>2)</td>
<td>Isopropyl alcohol</td>
<td>5~10</td>
</tr>
<tr>
<td>3)</td>
<td>Water</td>
<td>85~90</td>
</tr>
<tr>
<td>4)</td>
<td>Surfactants</td>
<td>0~5</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>No.</th>
<th>CAS No.</th>
<th>C.C</th>
<th>ACGIH-TLV</th>
<th>IARC</th>
<th>LD50 (mg/kg)</th>
<th>Other Hazards</th>
</tr>
</thead>
<tbody>
<tr>
<td>1)</td>
<td>Registered</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>&gt;2000 mouth*1</td>
<td>-</td>
</tr>
<tr>
<td>2)</td>
<td>67-63-0</td>
<td>-</td>
<td>400ppm</td>
<td>3</td>
<td>5045 mouth*2</td>
<td>-</td>
</tr>
<tr>
<td>3)</td>
<td>7732-18-5</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>4)</td>
<td>Registered</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>360 mouth*1</td>
<td>-</td>
</tr>
</tbody>
</table>

* Sign
   C.C: Control Criteria
   ACGIH: American Conference of Governmental Industrial Hygienists
   IARC: International Agency for Research on Cancer
   LD50: mouth*1 (mouse), mouth*2 (rat)
3.1 Additional Component Toxicity Information
   Not Available

3.2 Product Toxicity Information
   Not Available

4. Hazardous Substance
   Classification:
   • Non-flammable liquid
   Comments on Hazard:
   • Noncombustible.
   • Toxic by inhalation, in contact with skin and if swallowed
   • Irritating to eyes and skin

5. First Aid Measures
   5.1 Eye Contact
   • Gently rinse the affected eyes, including under the eyelids, with clean water for at least
     15 minutes. Remove contact lenses if easily possible.
   • Remove all chemicals from contact with the victim’s eyes as quickly as possible.
     A delay of only seconds may increase the injury.
   • And refer for medical attention, showing MSDS.

   5.2 Skin Contact
   • Remove all contaminated clothing, shoes and socks from the affected areas as quickly
     as possible, cutting them off if necessary.
   • Remove all chemicals from contact with the victim’s skin as quickly as possible.
     A delay of only seconds may increase the injury.
   If irritation persists, arrange for transport to the nearest medical facility for
   examination and treatment by a physician as soon as possible.

   5.3 Inhalation
   • Remove the victim from the contamination immediately to fresh air.
   • keep the victim warm and quiet.
   • If breathing is weak, irregular or has stopped, open his airway, loosen his collar
     and belt and administer artificial respiration.
   • Arrange for transport to the nearest medical facility for examination and treatment
     by a physician as soon as possible.

   5.4 Ingestion
   • Do not induce vomiting
   • Rinse mouth with water.
   • Do not make an unconscious person vomit
· Arrange for transport to the nearest medical facility for examination and treatment by a physician as soon as possible.

6. Fire Fighting Measures
   Specific hazards with regard to fire-fighting measure
   • During a fire, irritating and highly toxic gases may be generated by thermal decomposition (SO2)

   Extinguishing media
   • Dry chemical powder, foam or carbon dioxide.

7. Accidental release measures
   • Evacuate non essential personnel.
   • Ventilate area after material pick up is complete.
   • Absorb spill with inert material (e.g., dry sand or earth), then place in a chemical waste container with covers for disposal.
   • Remove leaking containers to a safe place, if feasible.
   • Wear proper protective equipment.
   • Prevent spills from entering sewers, watercourses or low areas.
   • Do not wash away into shower or waterway.

8. Handling
   • Use only in the well-ventilated area.
   • Do not breathe gases, vapour, spray.
   • Avoid contact with skin or eyes.
   • When using do not eat or drink.
   • Protect against physical damage.
   • Avoid rough handling or slide across sharp objects.

9. Storage
   • Store in a cool, dry, well-ventilated location.
   • Keep container tightly closed.
   • Avoid long storage periods since the product degrades with age.

10. Exposure Controls and Personal Protection
10.1 Control parameters
   ACGIH TLV — OSHA PEL —

10.2 Engineering measure
   • Use with local exhaust ventilation.
10.3 Personal Protective equipment

Eye:
- Wear protective eyeglasses or chemical safety goggles.

Skin:
- Wear gloves impervious to organic solvent and chemical.

Respiration and Ventilation:
- Wear gas mask for organic gas.

Others:

11. Physical and Chemical Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>liquid</td>
</tr>
<tr>
<td>Color</td>
<td>Dark brown</td>
</tr>
<tr>
<td>Odor</td>
<td>Slightly organic solvent odor</td>
</tr>
<tr>
<td>Boiling point</td>
<td>100°C (Water)</td>
</tr>
<tr>
<td>Vapor Pressure</td>
<td>0</td>
</tr>
<tr>
<td>Density</td>
<td>No data</td>
</tr>
</tbody>
</table>

12. Fire and Explosion Hazard Information

Inflammability and Explosion

<table>
<thead>
<tr>
<th>Property</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flash Point</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Ignition Point</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Explosion Limit</td>
<td>Not applicable</td>
</tr>
</tbody>
</table>

12.1 Reactivity and Stability

<table>
<thead>
<tr>
<th>Condition (Temperature, Light, etc.)</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Does not react under normal conditions.</td>
<td></td>
</tr>
</tbody>
</table>

12.2 Hazardous Reaction

Not Available

12.3 Product Decomposition / Dangerous Substance Generation

- Emits hazardous gases of SO2, etc. by combustion.

12.4 Other Reactivity Information

- Does not react under normal conditions.

12.5 Additional Information

Not Available

13. Environmental Protection Information
• Take precautions in the case of leak, spill or disposal, because of having influence on the environment.

14. Disposal Consideration
• This combustible material may be burned in a chemical incinerator equipped with an after-burner and scrubber
• Do not dump into sewers, on the ground or into any body of water.

15. Transportation Information
• Follow all regulations in your country.

16. Regulatory Information
• Ensure this materials in compliance with federal requirements and ensure conformity to local regulations.

17. Other Information
• The information herein is given in good faith, but no warranty, express or implied, is made.

please consult the MITSUBISHI RAYON CO., LTD. for further information.