Section 1 – Chemical Product and Company Identification

- **Product:** TINMATE 201 LS
  OrganoTin Stabilizer for Vinyl Applications

- **Product Description:** TINMATE 201 LS is highly effective liquid organo tin heat stabilizer, especially designed for thermally stabilizing Vinyl copolymers, that provides good early colour control and long term stability facilitating excellent transparency and colour hold with superior processing stability.

- **PRODUCT GRADE / CODE:** TINMATE 201 LS
- **CAS No.:** 57583-35-4
- **MANUFACTURER’S NAME:** Vikas Ecotech Ltd., New Delhi, India
- **PREPARED BY:** SENIOR CHEMIST

Section 2 – Composition/Information on Ingredients

- **MAIN COMPONENTS:**

<table>
<thead>
<tr>
<th>COMPONENT</th>
<th>CAS No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bis(2-ethylhexylthioglycolate)Dimethyl tin</td>
<td>57583-35-4</td>
</tr>
<tr>
<td>Tris(2-ethylhexylthioglycolate)methyl tin</td>
<td>57583-34-3</td>
</tr>
<tr>
<td>Thio ester (2-EHTG)</td>
<td>7659-86-1</td>
</tr>
</tbody>
</table>

Section 3 – Hazards Identification

- **SKIN:** MAY CAUSE MILD IRRITATION AND/OR SKIN ALLERGY.
- **EYES:** MAY CAUSE MILD IRRITATION.
- **INHALING:** MAY CAUSE NAUSEA & VOMITING.
- **EXPOSURE:** PROLONGED OVEREXPOSURE MAY EFFECT GENERAL HEALTH AND GENERAL INDUSTRIAL PRACTICES SHALL BE FOLLOWED WHILE HANDLING & USAGE.
Section 4 – First Aid Measures
- **EYES:** Flush eyes with water; seek medical help if the irritation persists.
- **SKIN:** Wash skin with water and soap; seek medical help if the irritation persists.
- **INHALATION:** Move to fresh air, seek medical help.
- **INGESTION:** Do not give liquids; seek medical help immediately.

Section 5 – Fire Fighting Measures
- **FIRE HAZARD:**
  - Boiling point: > 221 °C ( > 429.98 °F )
  - Flash point 150 °C ( 302.00 °F )
  - Generally inflammable: however may burn at elevated temperatures.
  - Extinguishing media: water / Co₂ foam.
  - Combustion generates toxic fumes of the following: carbon dioxide, sulfur oxides.
  - High temperatures can cause sealed containers to rupture due to a build up or of internal pressure.

Section 6 – Accidental Release Measures
- High temperatures can cause sealed containers to rupture due to a build up or of internal pressure.

Section 7 – Handling and Storage
- **HANDLING:**
  - Use protective equipment etc.
  - Avoid spill which can create slippery conditions.
  - Avoid breathing vapours.
  - Wash thoroughly after handling, keep the containers closed.

- **STORAGE:**
  - Indoor storage is recommended, store in dry, ventilated place.
  - Plastic drum or stainless steel use for storing, piping, for storage / transfer of material should be handled with normal precautions for organic liquids.

Section 8 – Exposure Control/Personal Protection
- **SKIN:** May cause mild irritation and/or skin allergy.
- **EYES:** May cause mild irritation.
- **INHALING:** May cause nausea & vomiting.
Section 9 – Physical and Chemical Properties

- **Physical & Chemical Properties:**

<table>
<thead>
<tr>
<th>Particulars</th>
<th>Unit</th>
<th>TINMATE 201LS Standard</th>
<th>Testing Procedure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Clear colourless Liquid</td>
<td>Visual</td>
<td></td>
</tr>
<tr>
<td>Color</td>
<td>(Gardner)</td>
<td>&lt; 1</td>
<td>By Comparator</td>
</tr>
<tr>
<td>Viscosity at 25 °C</td>
<td>cSt</td>
<td>70 Max</td>
<td>Ostwald Viscometer (U tube)</td>
</tr>
<tr>
<td>Specific Gravity at 20°C</td>
<td></td>
<td>1.17 ± 0.003</td>
<td>Hydrometer</td>
</tr>
<tr>
<td>Refractive Index at 25°C</td>
<td></td>
<td>1.507 - 1.511</td>
<td>Refractometer</td>
</tr>
</tbody>
</table>

Section 10 – Stability and Reactivity

- Generally Stable / Non Reactive
- Incompatible To : Acids

Section 11 – Toxicological Information

- AVOID CONTACT WITH SKIN: MAY CAUSE IRRITATION AND / OR SKIN ALLERGY, WEAR GLOVES, AVOID SPILLAGE.
- AVOID CONTACT WITH EYES: MAY CAUSE IRRITATION, WEAR PROTECTIVE SAFETY GLASSES.
- AVOID INHALING: MAY CAUSE NAUSEA & VOMITTING.

Section 12 – Ecological Information

- METHYLTIN COMPOUNDS ARE NATURALLY PRESENT IN THE ENVIRONMENT AND LIKELY RESULT FROM AEROBIC AND ANAEROBIC METHYLATION OF INORGANIC TIN. METHYL TIN HEAT STABILIZERS ARE NOT SOLUBLE IN WATER. THEY HAVE THE LIMITED POTENTIAL TO HARM AQUATIC ORGANISMS; HOWEVER CONCENTRATIONS OF THESE PRODUCTS ARE UNLIKELY TO BE REACHED DUE TO THE INDUSTRY-WIDE STEWARDSHIP PRICTICES THAT ARE IN PLACE TO LIMIT ENVIROMENTAL RELEASES OF METHYL TIN HEAT STABILIZERS ARE EXPECTED TO BE MINIMAL. SHOULD RELEASES OCCUR THEY WOULD GENERALLY BE TO WATER. THESE MATERIALS WILL TEND TO PARTITION TO AQUATIC SEDIMENTS AND TO SUSPENDED PARTICULATE MATTER IN THE WATER. EVAPORATION OF THESE PRODUCTS IS EXPECTED TO BE NEGLIGIBLE.

Section 13 – Disposal Considerations

- DISPOSAL: REFER TO ALL FEDERAL, STATE AND LOCAL REGULATIONS PRIOR TO DISPOSITION. IF UNABLE TO MANAGE, CONTACT A FACILITY THAT COMPLIES WITH LOCAL,
STATE, AND FEDERAL REGULATIONS

Section 14 – Transport Information

- TRANSPORTATION: NOT REGULATED

Section 15 – Regulatory Information

- NA

Section 16 – Other Information

Disclaimer:

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Before handling this material, read and understand the MSDS (Material Safety Data Sheet) for additional information on personal protective equipment and for safety, health and environmental information.

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