SAFETY DATA SHEET

1. Chemical Product and Company Identification
   Product Name : Aluminum Lactate
   Other Name : Aluminium Lactate
   Aluminum trilactate
   Aluminum Tris-(2-Hydroxypropanoate)
   Manufacturer : Musashino Chemical Laboratory, Ltd.
   Address : Tekko Bldg., 8-2, Marunouchi 1-Chome,
             Chiyoda-Ku, Tokyo 100-0005
   TEL : +81-3-6810-0242
   FAX : +81-3-6810-0148

2. Hazards Identification
   Hazard Classification : Not classified
   Hazard Statement : Nothing

3. Composition/Information of Ingredients
   It is single substance of Aluminium Lactate.
   Ingredient and Content :
     Single component

   Formula : \[
     \left( \frac{\text{CH}_3}{\text{HO} - \text{CH} - \text{COO}} \right)_3 \text{Al}
   \]
   MITI No. : 2-1376
   CAS No. : 18917-91-4
   EINECS : 242-670-9

4. First Aid Measures
   First Aid Measures under different exposure routes :
   Inhalation :
     Move the exposed person to fresh air at once. Get medical attention.
   Skin Contact :
     Wash the skin immediately with lukewarm water.
   Eye Contact :
     Continue to rinse for at least 15 minutes. Make sure to remove any contact lenses
     from the eyes before rinsing. Get medical attention if any discomfort continues.
   Ingestion :
     Immediately rinse mouth and drink plenty of water. Get medical attention
     immediately.
Most important symptoms and effects:
No information available.
Protection of first aider:
No information available.
Notes for the physician:
No information available.

5. Fire Fighting Measures
Suitable extinguishing media:
This product is not flammable. Use fire extinguishing media appropriate for surrounding materials. Dry chemicals. Foam.
Special hazards arising from the product:
No information available.
Special fire-fighting methods:
Fire-fighting in the wind. Remove from fire and move to empty place. Cool containers with water spray. Provide adequate ventilation. Prevent fire extinguishing water from contaminating surface water or the ground water system.
Protection for fire-fighters:
Fire-fighters should wear appropriate breathing apparatus and protective equipment.

6. Accidental Release Measures
Personal precautions:
Wear personal protective equipment (See section 8).
Environmental precautions:
It is biodegradable. And it is thought that fish toxicity is low.
Methods cleaning up:
Collect immediately to prevent it from scattering. Flush area with water. Handle waste appropriately.

7. Handling and Storage
Handling:
Avoid spilling, skin and eye contact. Wear appropriate clothing to prevent any possibility of skin contact.
Storage:
Store in tightly closed original container. Protect from light, including direct sunrays. Store below room temperature.
8. **Exposure Controls/Personal Protection**
   Engineering control:
   Provide local exhaust or process enclosure ventilation system.

   Personal protective equipment:
   - Respiratory protection: In case of inadequate ventilation wear respiratory protection.
   - Hand protection: Wear protective gloves.
   - Eye protection: Wear approved safety goggles.
   - Skin and body protection: Wear appropriate clothing to prevent any possibility of skin contact.

   Hygiene measures:
   Handle in accordance with good industrial hygiene and safety practice. Do not eat, drink or smoke when using this product. Wash thoroughly after handling.

9. **Physical and Chemical Properties**
   Appearance: Powder.
   Color: White
   Odor: Odorless or slightly characteristic odor
   pH(1→11): 3.0~4.0
   Flash Point: Not available
   Flammability: Not flammable
   Solubility: Soluble in Water

10. **Stability and Reactivity**
    Stability: Stable under normal conditions of handling, storage use.
    Reactivity: Not available.
    Hazardous decomposition products: Not available.

11. **Toxicological Information**
    Acute Toxicity: After dosage of 100, 200, 300mg of aluminium lactate to pregnant rat, weight decrease and death rate of rat pup are seen. Embryo toxicity and neurotoxicity are reported.
    Local Effect: No data
    Toxic dose: TDL₀ 6,270mg/kg (Mouse, preg 6·15D oral)
                   Embryo and/or fetal toxicity

12. **Ecological Information**
    Persistence/degradability: Good.
13. **Disposal Consideration**

Waste Disposal methods: Incinerate in suitable combustion chamber. Dispose of waste and residues in accordance with local authority requirements.

14. **Transport Information**

| UN Number | Not regulated |
| UN Proper shipping name | Not regulated |
| UN Classification | Not regulated |
| Packing Group | Not regulated |
| Mark/Label(s) | Not regulated |
| Marine pollutant (Yes/No) | No |
| Additional information | The materials transportation by vehicles, the sender serves deliverers with instructions for safe handling. In transportation confirm leakless of the container, and load the materials not to upset, fall and damage. Secure preventing the load from falling. |

15. **Regulatory Information**

Applicable regulations:


16. **Other Information**

References:

   Bernuzzi, V.; Desor, D.; Lehr, P.R.
2) "The Handbook of Prevention for Dangerous Substances Accident and Emergencies"
   KOBEKAINAN BOSHIKENKYUKAI published by SEIZANDO (Japanese)
3) The Merck Index 12th Ed. (1986)
4) Research Communications in Chemical Pathology and Pharmacology. (1992) 77(1), 95-106

Disclaimer:

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