

## MATERIAL SAFETY DATA SHEET

### 1. Chemical Product and Company Identification

Product Name	Aluminium Lactate F
Manufacturer	Musashino Chemical Laboratory, Ltd.
Department in charge	Assurance
TEL	+81-3-6810-0241
FAX	+81-3-6810-0126
Emergency telephone number	+81-3-6810-0242
Arrangement number	
Recommended use of the product and restrictions on use	

### 2. Hazards Identification

GHS Classification  
Physicochemical hazards

Hazard Classification	Not classified
Hazard Statement	Nothing

GHS Level Elements

Pictograms



Signal word

**Warning**

Hazard statements

Strong eye irritation  
Harmful to aquatic life

Attention

Safety measure

Wash ... thoroughly after handling.  
Wear protective gloves / protective clothing / eye protection / face protection.  
Avoid release to the environment.

First aid measures

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Disposal

If eye irritation persists: Get medical advice/attention.  
Dispose of contents / container in accordance with local / national regulation.

### 3. Composition/Information of Ingredients

Ingredient and Content	Single component
Chemical name/common name	Aluminium Lactate
Other name	Aluminium Trilactate, Aluminium Tris-(2-Hydroxypropanoate)
Composition material	Aluminium Lactate
Content	More than 98.5%
Molecular formula	$C_9H_{15}AlO_9$ (294.19)
Indicative formula	$(CH_3CH(OH)COO)_3Al$
CAS No.	18917-91-4
MITI No.	2-1376
TSCA	ACTIVE
EINECS	242-670-9
Tariff classification of Export goods	2918.11-900
Tariff classification of Imported goods	2918.11-000

## 4. First Aid Measures

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.

## 5. Fire Fighting Measures

Suitable extinguishing media	Dry chemicals extinguisher or Foam
Prohibited media	No data
Special hazards arising from 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.

## 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	Technical countermeasure	Take equipment measures as described in "8. Exposure Controls / Personal Protection" and wear protective equipment.
	Precautions for safe handling	It is hygroscopic, so handle with care when handling moisture. After handling Wash hands thoroughly. Avoid contact with skin.
Storage	Safe storage conditions	Store in tightly closed original container. Protect from light, including direct sunrays. Store below room temperature.
	Safe containers and packaging materials	Resin-based materials such as polyethylene, or stainless steel materials

## 8. Exposure Controls/Personal Protection

Control value		Not established
Adopted value	Japan society for Occupational Health	Not established
	ACGIH	Not established
Appropriate engineering controls		A safety shower, hand washing and eye washing facilities should be installed near the handling area. Install general ventilation and local exhaust ventilation in the workplace.
Protection	Respiratory protection	Wear appropriate respiratory protection.
	Hand protection	Wear appropriate protective gloves.
	Eye and face protection	Wear appropriate protective goggles or face shield.
	Skin and body protection	Wear appropriate protective clothing.

## 9. Physical and Chemical Properties

Physical State	Appearance	Powder
	Color	White
	Odor	Odorless or slightly characteristic odor

Melting / Freezing point	more than 300 °C
boiling point	No data
Flammability	Not flammable
Lower and upper explosion limit/flammability limit	No data
Flash Point	Not available
Auto-ignition Temperature	No data
Resolution temperature	No data
pH(1→11)	3.0~4.0
Kinematic viscosity	No data
Solubility	Soluble in Water
n-Octanol / water partition coefficient	logP = -3.620
Vapor pressure	No data
Density and / or relative density	No data
Relative vapor density	No data
Particle characteristics	No data
Others	No data
10. Stability and Reactivity	
Reactivity	No data
Stability	Stable under normal conditions of handling, storage use.
Possibility of hazardous reactions	Not available.
Conditions of Avoid	Flaming, Over heating, and Direct sunlight Strong oxidizing compound
Hazardous decomposition products	Carbon oxide and Aluminium oxide
11. Toxicological Information	
Acute toxicity (Oral)	Oral(LD <sub>50</sub> )Rat > 2000 mg/kg
Acute toxicity (Skin)	No data
Acute toxicity (Inhalation: Gas)	No data
Acute toxicity(Inhalation: Vapor)	No data
Acute toxicity (Inhalation: Mist)	No data
Skin corrosion / Irritation	No data
Serious eyes damage / irritation	GHS class : 2A
Respiratory sensitization	No data
Skin sensitization	No data
Germ cell mutagenicity	No data
Carcinogenicity	No data
Reproduction toxicity	No data
Breastfeeding effect	No data
Specification target internal organs / systemic toxicity (single exposure)	No data
Specification target internal organs / systemic toxicity (repeat exposure)	No data
Aspiration hazard	No data
12. Ecological Information	
Toxicological environment effects	
Aquatic environmental toxicity: acute	GHS class : 3
Aquatic environmental toxicity: chronic	No data
Persistence and degradability	Persistence/degradability
Bioaccumulative potential	No data
Mobility in soil	No data
Hazardous to the ozone layer	No data
13. Disposal Consideration	

Residues		Entrust the contents to a specialized waste disposal company licensed by the prefectural governor.
Contaminated containers and packaging		Clean and recycle containers or dispose of them appropriately in accordance with relevant laws and regulations and local government standards.  When discarding an empty container, completely remove the contents.
14. Transport Information		
International restriction		
	UN Number	Not regulated
	UN proper shipping name	Not regulated
	UN Classification	Not regulated
	Packing Group	Not regulated
	Marine pollutant (Yes/No)	No
Domestic restriction		
	Marine transportation information	Not applicable
	Aviation transportation information	Not applicable
	Rail and road transportation information	Not applicable
	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.
Emergency First Aid Guideline number		Not applicable
15. Regulatory Information		
Industrial Safety and Health Act		Dangerous or Harmful Substances Subject to Be Indicated their Names (Article 57, Order for Enforcement Article18)  Dangerous or Harmful Substances Subject to Be Indicated their Names (Article 57-2, Order for Enforcement Article 18-2 attached table 9, No.37(aluminum salt))  Assessment for Substances Specified by Cabinet Order pursuant to paragraph (1) of Article 57 and Substances Subject to Notice (Act No.57-3)
Water Pollution Prevention Act		Designated Substances (Article 3-3, Order for Enforcement Article3-3, No.44(aluminum salt))
Poisonous and Deleterious Substances Control Law PRTR(JAPAN)		Not applicable Not applicable
16. Other Information		
References		NITE-CHRIP Ministry of Health, Labour and Welfare IPEC Japan Synthetic Organic Chemistry Dictionary, The Society of Synthetic Organic Chemistry, Japan Chemistry Dictionary, KYORITU SHUPPAN CO., LTD. Etc.
Disclaimer		The information in this SDS is provided all the relevant data fully and truly. However, the information is provided without any warranty on their absolute extensiveness and accuracy. This SDS was prepared to provide safety preventive measures for the users who have got professional training. The personal user who obtained this SDS should make independent judgment for the applicability of this SDS under special

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