

## SAFETY DATA SHEET

Revision Date 31-Mar-2024

Revision Number 3

### 1. Identification

**Product Name** Tris(dimethylamino)aluminum dimer

**Cat No. :** 43237

**CAS No** 32093-39-3  
**Synonyms** No information available

**Recommended Use** Laboratory chemicals.  
**Uses advised against** Food, drug, pesticide or biocidal product use.

#### Details of the supplier of the safety data sheet

##### Company

Thermo Fisher Scientific Chemicals, Inc.  
30 Bond Street  
Ward Hill, MA 01835-8099  
Tel: 800-343-0660  
Fax: 800-322-4757

##### **Emergency Telephone Number**

For information **US** call: 001-800-227-6701 / **Europe** call: +32 14 57 52 11  
Emergency Number **US**:001-201-796-7100 / **Europe**: +32 14 57 52 99  
**CHEMTREC** Tel. No. **US**:001-800-424-9300 / **Europe**:001-703-527-3887

### 2. Hazard(s) identification

#### **Classification**

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

|  |              |
|--|--------------|
| Flammable solids   | Category 1   |
| Substances/mixtures which, in contact with water, emit flammable gases | Category 1   |
| Skin Corrosion/Irritation  | Category 1 B |
| Serious Eye Damage/Eye Irritation                                      | Category 1   |
| Specific target organ toxicity (single exposure)                       | Category 3   |
| Target Organs - Respiratory system.                                    |              |

#### Label Elements

##### **Signal Word**

Danger

##### **Hazard Statements**

Flammable solid

In contact with water releases flammable gases which may ignite spontaneously  
Causes severe skin burns and eye damage  
May cause respiratory irritation



### Precautionary Statements

#### Prevention

Use only outdoors or in a well-ventilated area  
Keep away from heat/sparks/open flames/hot surfaces. - No smoking  
Ground/bond container and receiving equipment  
Use explosion-proof electrical/ventilating/lighting equipment  
Do not breathe dust/fume/gas/mist/vapors/spray  
Wash face, hands and any exposed skin thoroughly after handling  
Wear protective gloves/protective clothing/eye protection/face protection  
Keep away from any possible contact with water, because of violent reaction and possible flash fire  
Handle under inert gas. Protect from moisture

#### Response

Immediately call a POISON CENTER or doctor/physician

#### Inhalation

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

#### Skin

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower  
Wash contaminated clothing before reuse  
Brush off loose particles from skin. Immerse in cool water/wrap with wet bandages

#### Eyes

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

#### Ingestion

IF SWALLOWED: Rinse mouth. DO NOT induce vomiting

#### Fire

In case of fire: Use CO<sub>2</sub>, dry chemical, or foam for extinction

#### Storage

Store in a well-ventilated place. Keep container tightly closed  
Store locked up  
Store in a dry place. Store in a closed container

#### Disposal

Dispose of contents/container to an approved waste disposal plant

#### Hazards not otherwise classified (HNOC)

Reacts violently with water

## 3. Composition/Information on Ingredients

| Component                         | CAS No     | Weight % |
|-----------------------------------|------------|----------|
| Tris(dimethylamino)aluminum dimer | 32093-39-3 | <=100    |

## 4. First-aid measures

### General Advice

Show this safety data sheet to the doctor in attendance. Immediate medical attention is required.

|  |  |
|--|--|
| <b>Eye Contact</b>                         | Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Immediate medical attention is required. Keep eye wide open while rinsing.  |
| <b>Skin Contact</b>                        | Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Call a physician immediately.  |
| <b>Inhalation</b>                          | Remove to fresh air. If not breathing, give artificial respiration. Call a physician or poison control center immediately. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. |
| <b>Ingestion</b>                           | Immediate medical attention is required. Do NOT induce vomiting. Drink plenty of water. Never give anything by mouth to an unconscious person.   |
| <b>Most important symptoms and effects</b> | Causes burns by all exposure routes. Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated: Ingestion causes severe swelling, severe damage to the delicate tissue and danger of perforation  |
| <b>Notes to Physician</b>                  | Treat symptomatically  |

## 5. Fire-fighting measures

|   |   |
|---|---|
| <b>Suitable Extinguishing Media</b>     | CO <sub>2</sub> , dry chemical, dry sand, alcohol-resistant foam. |
| <b>Unsuitable Extinguishing Media</b>   | No information available  |
| <b>Flash Point</b>                      | 21 °C / 69.8 °F   |
| <b>Method -</b>                         | No information available  |
| <b>Autoignition Temperature</b>         | No information available  |
| <b>Explosion Limits</b>                 |   |
| <b>Upper</b>                            | No data available   |
| <b>Lower</b>                            | No data available   |
| <b>Sensitivity to Mechanical Impact</b> | No information available  |
| <b>Sensitivity to Static Discharge</b>  | No information available  |

### Specific Hazards Arising from the Chemical

Reacts violently with water. The product causes burns of eyes, skin and mucous membranes.

### Hazardous Combustion Products

Dimethylamine.

### Protective Equipment and Precautions for Firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Thermal decomposition can lead to release of irritating gases and vapors.

### NFPA

**Health**  
3

**Flammability**  
3

**Instability**  
2

**Physical hazards**  
W

## 6. Accidental release measures

|   |  |
|---|--|
| <b>Personal Precautions</b>                 | Use personal protective equipment as required. Avoid contact with skin, eyes or clothing. Evacuate personnel to safe areas.                                  |
| <b>Environmental Precautions</b>            | Do not allow material to contaminate ground water system. Should not be released into the environment. See Section 12 for additional Ecological Information. |
| <b>Methods for Containment and Clean Up</b> | Sweep up and shovel into suitable containers for disposal. Do not expose spill to water. Avoid dust formation.   |

## 7. Handling and storage

|                 |   |
|-----------------|---|
| <b>Handling</b> | Wear personal protective equipment/face protection. Do not get in eyes, on skin, or on clothing. Do not allow contact with water. Use only under a chemical fume hood. Do not breathe dust. Do not ingest. If swallowed then seek immediate medical assistance. |
| <b>Storage.</b> | Corrosives area. Keep away from water or moist air. Keep containers tightly closed in a dry, cool and well-ventilated place.  |

## 8. Exposure controls / personal protection

|                                      |   |
|--------------------------------------|---|
| <b>Exposure Guidelines</b>           | This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.   |
| <b>Engineering Measures</b>          | Ensure that eyewash stations and safety showers are close to the workstation location.  |
| <b>Personal Protective Equipment</b> |   |
| <b>Eye/face Protection</b>           | Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.   |
| <b>Skin and body protection</b>      | Wear appropriate protective gloves and clothing to prevent skin exposure.   |
| <b>Respiratory Protection</b>        | Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced. |
| <b>Recommended Filter type:</b>      | Particulates filter conforming to EN 143.   |
| <b>Hygiene Measures</b>              | Handle in accordance with good industrial hygiene and safety practice.  |

## 9. Physical and chemical properties

|   |                               |
|---|-------------------------------|
| <b>Physical State</b>                         | Solid                         |
| <b>Appearance</b>                             | Light brown                   |
| <b>Odor</b>                                   | Amine compounds               |
| <b>Odor Threshold</b>                         | No information available      |
| <b>pH</b>                                     | No information available      |
| <b>Melting Point/Range</b>                    | 87 - 89 °C / 188.6 - 192.2 °F |
| <b>Boiling Point/Range</b>                    | 90 °C / 194 °F                |
| <b>Flash Point</b>                            | 21 °C / 69.8 °F               |
| <b>Evaporation Rate</b>                       | Not applicable                |
| <b>Flammability (solid,gas)</b>               | No information available      |
| <b>Flammability or explosive limits</b>       |                               |
| <b>Upper</b>                                  | No data available             |
| <b>Lower</b>                                  | No data available             |
| <b>Vapor Pressure</b>                         | No information available      |
| <b>Vapor Density</b>                          | Not applicable                |
| <b>Specific Gravity</b>                       | 0.865 g/cm3                   |
| <b>Solubility</b>                             | No information available      |
| <b>Partition coefficient; n-octanol/water</b> | No data available             |
| <b>Autoignition Temperature</b>               | No information available      |
| <b>Decomposition Temperature</b>              | No information available      |
| <b>Viscosity</b>                              | Not applicable                |
| <b>Molecular Formula</b>                      | C12 H36 Al2 N6                |
| <b>Molecular Weight</b>                       | 318.42                        |

## 10. Stability and reactivity

|   |  |
|---|--|
| <b>Reactive Hazard</b>                  | Yes  |
| <b>Stability</b>                        | Stable under normal conditions.                            |
| <b>Conditions to Avoid</b>              | Exposure to moist air or water. Exposure to moisture.      |
| <b>Incompatible Materials</b>           | Strong oxidizing agents                                    |
| <b>Hazardous Decomposition Products</b> | Dimethylamine  |
| <b>Hazardous Polymerization</b>         | Hazardous polymerization does not occur.                   |
| <b>Hazardous Reactions</b>              | None under normal processing. Reacts violently with water. |

## 11. Toxicological information

### Acute Toxicity

#### Product Information

#### Component Information

**Toxicologically Synergistic Products** No information available

#### Delayed and immediate effects as well as chronic effects from short and long-term exposure

|                        |  |
|------------------------|--|
| <b>Irritation</b>      | No information available   |
| <b>Sensitization</b>   | No information available   |
| <b>Carcinogenicity</b> | The table below indicates whether each agency has listed any ingredient as a carcinogen. |

| Component                         | CAS No     | IARC       | NTP        | ACGIH      | OSHA       | Mexico     |
|-----------------------------------|------------|------------|------------|------------|------------|------------|
| Tris(dimethylamino)aluminum dimer | 32093-39-3 | Not listed | Not listed | Not listed | Not listed | Not listed |

**Mutagenic Effects** No information available

**Reproductive Effects** No information available.

**Developmental Effects** No information available.

**Teratogenicity** No information available.

**STOT - single exposure** Respiratory system

**STOT - repeated exposure** None known

**Aspiration hazard** No information available

**Symptoms / effects, both acute and delayed** Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated: Ingestion causes severe swelling, severe damage to the delicate tissue and danger of perforation

**Endocrine Disruptor Information** No information available

**Other Adverse Effects** The toxicological properties have not been fully investigated.

## 12. Ecological information

### Ecotoxicity

Do not empty into drains.

|                                      |                           |
|--------------------------------------|---------------------------|
| <b>Persistence and Degradability</b> | No information available  |
| <b>Bioaccumulation/ Accumulation</b> | No information available. |
| <b>Mobility</b>                      | No information available. |

### 13. Disposal considerations

|                               |   |
|-------------------------------|---|
| <b>Waste Disposal Methods</b> | Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification. |
|-------------------------------|---|

### 14. Transport information

#### DOT

|                                |   |
|--------------------------------|---|
| <b>UN-No</b>                   | UN3131                                  |
| <b>Proper Shipping Name</b>    | Water-reactive solid, corrosive, n.o.s. |
| <b>Technical Name</b>          | (Tris(dimethylamino)aluminum dimer)     |
| <b>Hazard Class</b>            | 4.3                                     |
| <b>Subsidiary Hazard Class</b> | 8                                       |
| <b>Packing Group</b>           | I                                       |

#### TDG

|                                |   |
|--------------------------------|---|
| <b>UN-No</b>                   | UN3131                                  |
| <b>Proper Shipping Name</b>    | Water-reactive solid, corrosive, n.o.s. |
| <b>Hazard Class</b>            | 4.3                                     |
| <b>Subsidiary Hazard Class</b> | 8                                       |
| <b>Packing Group</b>           | I                                       |

#### IATA

|                                |  |
|--------------------------------|--|
| <b>UN-No</b>                   | UN3131                                   |
| <b>Proper Shipping Name</b>    | WATER-REACTIVE SOLID, CORROSIVE, N.O.S.* |
| <b>Hazard Class</b>            | 4.3                                      |
| <b>Subsidiary Hazard Class</b> | 8  |
| <b>Packing Group</b>           | I  |

#### IMDG/IMO

|                                |   |
|--------------------------------|---|
| <b>UN-No</b>                   | UN3131                                  |
| <b>Proper Shipping Name</b>    | Water-reactive solid, corrosive, n.o.s. |
| <b>Hazard Class</b>            | 4.3                                     |
| <b>Subsidiary Hazard Class</b> | 8                                       |
| <b>Packing Group</b>           | I                                       |

### 15. Regulatory information

#### United States of America Inventory

| Component                         | CAS No     | TSCA | TSCA Inventory notification - Active-Inactive | TSCA - EPA Regulatory Flags |
|-----------------------------------|------------|------|---|-----------------------------|
| Tris(dimethylamino)aluminum dimer | 32093-39-3 | -    | -   | -                           |

#### **Legend:**

**TSCA** US EPA (TSCA) - Toxic Substances Control Act, (40 CFR Part 710)

X - Listed

'-' - Not Listed

#### **TSCA - Per 40 CFR 751, Regulation of Certain Chemical Substances & Mixtures, Under TSCA Section 6(h) (PBT)**

Not applicable

#### **TSCA 12(b)** - Notices of Export

Not applicable

#### International Inventories

Canada (DSL/NDL), Europe (EINECS/ELINCS/NLP), Philippines (PICCS), Japan (ENCS), Japan (ISHL), Australia (AICS), China (IECSC), Korea

(KECL).

| Component                         | CAS No     | DSL | NDSL | EINECS | PICCS | ENCS | ISHL | AICS | IECSC | KECL |
|-----------------------------------|------------|-----|------|--------|-------|------|------|------|-------|------|
| Tris(dimethylamino)aluminum dimer | 32093-39-3 | -   | -    | -      | -     | -    |      | -    | -     | -    |

KECL - NIER number or KE number (<http://ncis.nier.go.kr/en/main.do>)**U.S. Federal Regulations****SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

**SARA 311/312 Hazard Categories**

Should this product meet EPCRA 311/312 Tier reporting criteria at 40 CFR 370, refer to Section 2 of this SDS for appropriate classifications.

**CWA (Clean Water Act)** Not applicable

**Clean Air Act** Not applicable

**OSHA - Occupational Safety and Health Administration** Not applicable

**CERCLA**

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

**California Proposition 65** This product does not contain any Proposition 65 chemicals.

**U.S. State Right-to-Know Regulations** Not applicable

**U.S. Department of Transportation**

Reportable Quantity (RQ): N  
DOT Marine Pollutant N  
DOT Severe Marine Pollutant N

**U.S. Department of Homeland Security** This product does not contain any DHS chemicals.

**Other International Regulations**

**Mexico - Grade** No information available

**Authorisation/Restrictions according to EU REACH** Not applicable

| Component                         | CAS No     | REACH (1907/2006) - Annex XIV - Substances Subject to Authorization | REACH (1907/2006) - Annex XVII - Restrictions on Certain Dangerous Substances | REACH Regulation (EC 1907/2006) article 59 - Candidate List of Substances of Very High Concern (SVHC) |
|-----------------------------------|------------|---|---|---|
| Tris(dimethylamino)aluminum dimer | 32093-39-3 | -   | -   | -   |

## Safety, health and environmental regulations/legislation specific for the substance or mixture

| Component                         | CAS No     | OECD HPV       | Persistent Organic Pollutant | Ozone Depletion Potential | Restriction of Hazardous Substances (RoHS) |
|-----------------------------------|------------|----------------|------------------------------|---------------------------|--|
| Tris(dimethylamino)aluminum dimer | 32093-39-3 | Not applicable | Not applicable               | Not applicable            | Not applicable                             |

## Contains component(s) that meet a 'definition' of per &amp; poly fluoroalkyl substance (PFAS)?

Not applicable

## Other International Regulations

| Component                         | CAS No     | Seveso III Directive (2012/18/EC) - Qualifying Quantities for Major Accident Notification | Seveso III Directive (2012/18/EC) - Qualifying Quantities for Safety Report Requirements | Rotterdam Convention (PIC) | Basel Convention (Hazardous Waste) |
|-----------------------------------|------------|---|--|----------------------------|------------------------------------|
| Tris(dimethylamino)aluminum dimer | 32093-39-3 | Not applicable  | Not applicable   | Not applicable             | Not applicable                     |

## 16. Other information

## Prepared By

Health, Safety and Environmental Department  
Email: chem.techinfo@thermofisher.com  
www.thermofisher.com

## Revision Date

31-Mar-2024

## Print Date

31-Mar-2024

## Revision Summary

New emergency telephone response service provider.

## Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text

**End of SDS**