

Classified as hazardous according to criteria of EPA New Zealand

## Section 1 - Identification

**Product Name** Ammonium molybdate

|                                |  |
|--------------------------------|--|
| <b>Product Code</b>            | <b>AJA46, BSPAM143, ACR20585, ACR42331, ACR44854, ALFA13766, FSBA/5720, FSBA/5760, ALF011831</b> |
| <b>Address</b>                 | Thermo Fisher Scientific New Zealand Ltd<br>244 Bush Road, Albany,<br>Auckland, New Zealand      |
| <b>Emergency Tel.</b>          | <b>CHEMTREC®</b><br><b>09 980 6780 or +64 9 980 6780</b>   |
| <b>Telephone / Fax Numbers</b> | Tel: 09 980 6700<br>Fax: 09 980 6788   |
| <b>E-mail address</b>          | <u>NZinfo@thermofisher.com</u>   |

**Recommended Use** Laboratory chemicals.

## Section 2 - Hazard(s) Identification

### Classification under Work Safe New Zealand

- 6.1D - Substances that are acutely toxic (Oral)
- 6.9B - Substances that are harmful to human target organs or systems
- 9.3C - Substances that are harmful to terrestrial vertebrates
- 6.3A - Substances that are irritating to the skin
- 6.4A - Substances that are irritating to the eye
- 6.1E - Substances that are acutely toxic (Inhalation)

Classified as hazardous according to criteria of EPA New Zealand

**HSNO Approval Number** **HSR006202**

### GHS Classification

#### Physical hazards

Based on available data, the classification criteria are not met

#### Health hazards

|  |            |
|--|------------|
| Acute Oral Toxicity                                | Category 4 |
| Skin Corrosion/Irritation                          | Category 2 |
| Serious Eye Damage/Eye Irritation                  | Category 2 |
| Specific target organ toxicity - (single exposure) | Category 3 |

#### Environmental hazards

#### Label Elements

**Signal Word****Danger****Hazard Statements**

H302 - Harmful if swallowed  
H319 - Causes serious eye irritation  
H433 - Harmful to terrestrial vertebrates  
H315 - Causes skin irritation  
H335 - May cause respiratory irritation

**Precautionary Statements**

P261 - Avoid breathing dust/fume/gas/mist/vapors/spray  
P264 - Wash face, hands and any exposed skin thoroughly after handling  
P270 - Do not eat, drink or smoke when using this product  
P271 - Use only outdoors or in a well-ventilated area  
P280 - Wear protective gloves/protective clothing/eye protection/face protection  
P302 + P352 - IF ON SKIN: Wash with plenty of soap and water  
P304 + P340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing  
P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
P312 - Call a POISON CENTER or doctor/physician if you feel unwell  
P330 - Rinse mouth  
P362 - Take off contaminated clothing and wash before reuse  
P403 + P233 - Store in a well-ventilated place. Keep container tightly closed  
P501 - Dispose of contents/ container to an approved waste disposal plant

**Other information**

No information available

## Section 3 - Composition and Information on Ingredients

| Component               | CAS-No     | Weight % |
|-------------------------|------------|----------|
| Ammonium heptamolybdate | 12054-85-2 | 100      |

## Section 4 - First Aid Measures

|  |  |
|--|--|
| <b>Inhalation</b>                          | Remove to fresh air.   |
| <b>Ingestion</b>                           | Clean mouth with water and drink afterwards plenty of water.   |
| <b>Skin Contact</b>                        | Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes.                |
| <b>Eye Contact</b>                         | Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician. |
| <b>Self-Protection of the First Aider</b>  | No special precautions required.   |
| <b>First Aid Facilities</b>                | Eyewash, safety shower and washroom.   |
| <b>Most important symptoms and effects</b> | No information available.  |

**Notes to Physician**

Treat symptomatically.

## Section 5 - Fire Fighting Measures

**Suitable Extinguishing Media**

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**Extinguishing media which must not be used for safety reasons**

No information available.

**Hazardous Combustion Products****Specific Hazards Arising from the Chemical**

Thermal decomposition can lead to release of irritating gases and vapors.

**Special protective equipment and precautions for fire fighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

## Section 6 - Accidental Release Measures

**Emergency procedures**

Ensure adequate ventilation.

**Environmental Precautions**

See Section 12 for additional Ecological Information.

**Reference to Other Sections**

Refer to protective measures listed in Sections 8 and 13.

## Section 7 - Handling and Storage

**Precautions for Safe Handling**

Ensure adequate ventilation.

**Conditions for Safe Storage, Including any Incompatibilities**

Keep container tightly closed in a dry and well-ventilated place.

AS/NZS 2243.10:2004, Safety in laboratories - Storage of chemicals

## Section 8 - Exposure Controls and Personal Protection

**Exposure limits**

The product does not contain any hazardous materials with occupational exposure limits established.

**Biological limit values**

This product, as supplied, does not contain any hazardous materials with biological limits established by the region specific regulatory bodies

**Engineering Measures**

None under normal use conditions. Ensure that eyewash stations and safety showers are close to the workstation location.

**Personal protective equipment****Eye Protection**

Goggles (Australian/New Zealand Standard AS/NZS 1337 - Eye protectors for Industrial applications)

**Hand Protection**

Protective gloves

| Glove material                                 | Breakthrough time                 | Glove thickness | AUS/NZ Standard | Glove comments        |
|--|-----------------------------------|-----------------|-----------------|-----------------------|
| Natural rubber, Nitrile rubber, Neoprene, PVC. | See manufacturers recommendations | -               | AS/NZS 2161     | (minimum requirement) |

Inspect gloves before use.

Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves.

(Refer to manufacturer/supplier for information)

Ensure gloves are suitable for the task: Chemical compatibility, Dexterity, Operational conditions, User susceptibility, e.g. sensitisation effects, also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion.

Remove gloves with care avoiding skin contamination.

|                                 |   |
|---------------------------------|---|
| <b>Skin and body protection</b> | Long sleeved clothing   |
| <b>Respiratory Protection</b>   | Use an AS/NZS 1716 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced. To protect the wearer, respiratory protective equipment must be the correct fit and be used and maintained in line with AS/NZS 1715 on the use and maintenance of respiratory protective devices |
| <b>Recommended Filter type:</b> | Particle filter (or AUS/NZ equivalent)  |

**Hygiene Measures** Handle in accordance with good industrial hygiene and safety practice.

**Environmental exposure controls** No information available.

## Section 9 - Physical and Chemical Properties

### Information on basic physical and chemical properties

|  |  |  |
|--|--|--|
| <b>Appearance</b>                              | White  |  |
| <b>Physical State</b>                          | Powder Solid   |  |
| <b>Odor</b>                                    | No information available   |  |
| <b>Odor Threshold</b>                          | No data available  |  |
| <b>pH</b>                                      | Not applicable   |  |
| <b>Melting Point/Range</b>                     | No data available - °C / - 239 °F  |  |
| <b>Softening Point</b>                         | No data available  |  |
| <b>Boiling Point/Range</b>                     | Not applicable   |  |
| <b>Flash Point</b>                             | Not applicable   | <b>Method -</b> No information available |
| <b>Evaporation Rate</b>                        | Not applicable   | Solid                                    |
| <b>Flammability (solid,gas)</b>                | No information available   |  |
| <b>Explosion Limits</b>                        | No data available  |  |
| <b>Vapor Pressure</b>                          | No data available  |  |
| <b>Vapor Density</b>                           | Not applicable   | Solid                                    |
| <b>Specific Gravity / Density</b>              | No data available  |  |
| <b>Bulk Density</b>                            | No data available  |  |
| <b>Water Solubility</b>                        | No information available   |  |
| <b>Solubility in other solvents</b>            | No information available   |  |
| <b>Partition Coefficient (n-octanol/water)</b> |  |  |
| <b>Autoignition Temperature</b>                | Not applicable   |  |
| <b>Decomposition Temperature</b>               | No data available  |  |
| <b>Viscosity</b>                               | Not applicable   | Solid                                    |
| <b>Explosive Properties</b>                    | No information available   |  |
| <b>Oxidizing Properties</b>                    | No information available   |  |
| <b>Other information</b>                       |  |  |
| <b>Molecular Formula</b>                       | (NH <sub>4</sub> ) <sub>6</sub> MO <sub>7</sub> O <sub>24</sub> .4H <sub>2</sub> O |  |
| <b>Molecular Weight</b>                        | 1235.86  |  |

## Section 10 - Stability and Reactivity

**Reactivity** None known, based on information available

**Stability** Stable under normal conditions.

**Conditions to Avoid** Heat, flames and sparks.

**Hazardous Decomposition Products** None under normal use conditions.

**Hazardous Polymerization** No information available.

## Section 11 - Toxicological Information

### Information on Toxicological Effects

#### Product Information

**(a) acute toxicity;**

|            |                   |
|------------|-------------------|
| Oral       | Category 4        |
| Dermal     | No data available |
| Inhalation | No data available |

| Component               | LD50 Oral             | LD50 Dermal | LC50 Inhalation |
|-------------------------|-----------------------|-------------|-----------------|
| Ammonium heptamolybdate | LD50: 333 mg/kg (Rat) |             |                 |

**(b) skin corrosion/irritation;** Category 2

**(c) serious eye damage/irritation;** Category 2

**(d) respiratory or skin sensitization;**

|             |                   |
|-------------|-------------------|
| Respiratory | No data available |
| Skin        | No data available |

**(e) germ cell mutagenicity;** No data available

**(f) carcinogenicity;** No data available

**(g) reproductive toxicity;** There are no known carcinogenic chemicals in this product

**(h) STOT-single exposure;** No data available

**(i) STOT-repeated exposure;** Category 3

**Results / Target organs** Respiratory system

**(i) STOT-repeated exposure;** No data available

**Target Organs** No information available.

**(j) aspiration hazard;** Not applicable  
Solid

**Symptoms / effects, both acute and delayed** No information available

## Section 12 - Ecological Information

#### Ecotoxicity effects

**Persistence and Degradability** .

**Degradability** Not relevant for inorganic substances.

**Bioaccumulative Potential** No information available

**Mobility** No information available.

**Endocrine Disruptor Information** This product does not contain any known or suspected endocrine disruptors

**Persistent Organic Pollutant** This product does not contain any known or suspected substance

**Ozone Depletion Potential** This product does not contain any known or suspected substance

## Section 13 - Disposal Considerations

|  |  |
|--|--|
| <b>Waste from Residues/Unused Products</b> | Do not allow into drains or watercourses or dispose of where ground or surface waters may be affected. Wastes, including emptied containers, are controlled wastes and should be disposed of in accordance with all federal, E.P.A., state and local regulations. Assure conformity with all applicable regulations. |
| <b>Contaminated Packaging</b>              | Dispose of this container to hazardous or special waste collection point.  |
| <b>Other Information</b>                   | Disposal agencies or waste contractors must comply with the New Zealand Hazardous Substances (Disposal) Regulations. Waste codes should be assigned by the user based on the application for which the product was used. Do not empty into drains.   |

## Section 14 - Transport Information

|                               |                                 |
|-------------------------------|---------------------------------|
| <b>IMDG/IMO</b>               | Not regulated                   |
| <b>NZS 5433:2012</b>          | Not regulated                   |
| <b>IATA</b>                   | Not regulated                   |
| <b>Environmental hazards</b>  | No hazards identified           |
| <b>Special Precautions</b>    | No special precautions required |
| <b>Additional information</b> | None known                      |

## Section 15 - Regulatory Information

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

| Component               | HSNO Approval Number |
|-------------------------|----------------------|
| Ammonium heptamolybdate | HSR006202            |

**International Inventories** X = listed

| Component               | NZIoC | AICS | EINECS | ELINCS | TSCA | DSL | NDSL | PICCS | ENCS | IECSC | KECL |
|-------------------------|-------|------|--------|--------|------|-----|------|-------|------|-------|------|
| Ammonium heptamolybdate | X     | X    | -      | -      | -    | -   | -    | X     | X    | X     | -    |

**Prohibition or notification/licensing requirements** Shown below are details of specific prohibition/notifications or licensing requirements when they apply.

## Section 16 - Other Information

This safety data sheet complies with the requirements of WorkSafe New Zealand Regulations

### Legend

|  |  |
|--|--|
| <b>AICS</b> - Australian Inventory of Chemical Substances  | <b>NZIoC</b> - New Zealand Inventory of Chemicals  |
| <b>TSCA</b> - United States Toxic Substances Control Act Section 8(b) Inventory                      | <b>EINECS/ELINCS</b> - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances |
| <b>DSL/NDSL</b> - Canadian Domestic Substances List/Non-Domestic Substances List                     | <b>ENCS</b> - Japanese Existing and New Chemical Substances  |
| <b>IECSC</b> - Chinese Inventory of Existing Chemical Substances                                     | <b>KECL</b> - Korean Existing and Evaluated Chemical Substances  |
| <b>PICCS</b> - Philippines Inventory of Chemicals and Chemical Substances                            | <b>CAS</b> - Chemical Abstracts Service  |
| <b>TWA</b> - Time Weighted Average   | <b>ACGIH</b> - American Conference of Governmental Industrial Hygienists Predicted No Effect Concentration (PNEC)            |
| <b>IARC</b> - International Agency for Research on Cancer  | <b>IMO/IMDG</b> - International Maritime Organization/International Maritime Dangerous Goods Code                            |
| <b>ICAO/IATA</b> - International Civil Aviation Organization/International Air Transport Association | <b>ADG</b> Australian Code for the Transport of Dangerous Goods by Road and Rail   |
| <b>MARPOL</b> - International Convention for the Prevention of Pollution from Ships                  | <b>OECD</b> - Organisation for Economic Co-operation and Development   |
| <b>NZS 5433:2012</b> - Transport of Dangerous Goods on Land  | <b>LC50</b> - Lethal Concentration 50%   |
| <b>LD50</b> - Lethal Dose 50%  |  |

**EC50** - Effective Concentration 50%  
**WEL** - Workplace Exposure Limit  
**DNEL** - Derived No Effect Level  
**POW** - Partition coefficient Octanol:Water  
**vPvB** - very Persistent, very Bioaccumulative  
VOC (volatile organic compound)

**ATE** - Acute Toxicity Estimate  
**RPE** - Respiratory Protective Equipment  
**NOEC** - No Observed Effect Concentration  
**BCF** - Bioconcentration factor  
**PBT** - Persistent, Bioaccumulative, Toxic

**Key literature references and sources for data**

Suppliers safety data sheet, Chemadvisor - LOLI, Merck index, RTECS

**Training Advice**

Chemical hazard awareness training, incorporating labelling, Safety Data Sheets (SDS), Personal Protective Equipment (PPE) and hygiene.

**Revision Date** 07-Jul-2020  
**Revision Summary** Not applicable.

**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 Safety Data Sheet