

## MATERIAL SAFETY DATA SHEET (MSDS)

### AMMONIUM METAVANADATE LR (AMMONIUM MONOVANADATE)

#### 1. Identification of the substance/mixture and of the company/undertaking

##### 1.1. Product identifier

Trade name : AMMONIUM METAVANADATE LR (AMMONIUM MONOVANADATE)  
Product code : A0024500100  
Identification of the product : AMMONIUM - METAVANADATE 98%  
CAS No : 7803-55-6

##### 1.2. Relevant identified uses of the substance or mixture and uses advised against

Use : Industrial. For professional use only.

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

Company identification : SUVCHEM  
Chaitanya Tower, 2nd Floor, Office # 206,  
Siddharth Nagar, S.V. Road,  
Goregaon (West), Mumbai - 400062,  
Maharashtra, India.  
Contact: +91 22 28725393 / 94 / 95  
Email ID: info@suvchem.com/care@suvchem.com

##### 1.4. Emergency telephone number

Phone no. : + 91 22 28725393 / 94 / 95 (9:00am - 6:00 pm) [ Office hours ]

#### 2. Hazards identification -DSD

##### 2.1. Classification of the substance or mixture

###### Classification EC 67/548 or EC 1999/45

Classification : T; R25  
Xn; R20  
Xi; R36

###### Hazard Class and Category Code(s), Regulation (EC) No 1272/2008 (CLP)

Health hazards : Specific Target Organ Toxicity - Single exposure - Respiratory tract irritation - Category 3 - Warning (CLP : STOT SE 3) H335  
Acute toxicity, Inhalation - Category 4 - Warning (CLP : Acute Tox. 4) H332  
Eye irritation - Category 2A - Warning (CLP : Eye Irrit. 2) H319  
Acute toxicity, Oral - Category 3 - Danger (CLP : Acute Tox. 3) H301

##### 2.2. Label elements

###### Labelling EC 67/548 or EC 1999/45

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**AMMONIUM METAVANADATE LR (AMMONIUM MONOVANADATE)**
**2. Hazards identification -DSD (continued)**
**Symbol(s)**

**Symbol(s)**

: T : Toxic

**R Phrase(s)**

: R20 : Harmful by inhalation.

R25 : Toxic if swallowed.

R36 : Irritating to eyes.

R37 : Irritating to respiratory system.

**S Phrase(s)**

: S26 : In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S37 : Wear suitable gloves.

S45 : In case of accident or if you feel unwell, seek medical advice immediately ( show the label when possible).

**Labelling Regulation EC 1272/2008 (CLP)**
**Hazard pictograms**

**Signal words**

: Danger

**Hazard statements**

: H301 : Toxic if swallowed.

H319 : Causes serious eye irritation.

H332 : Harmful if inhaled.

H335 : May cause respiratory irritation.

**Precautionary statements**
**• Prevention**

: P280: Wear protective gloves, protective clothing, eye protection, face protection.

P271: Use only outdoors or in a well-ventilated area.

P261: Avoid breathing dust, fume, gas, mist, vapours, spray.

P264: Wash thoroughly after handling.

P270: Do not eat, drink or smoke when using this product.

**• Response**

: P301+P310: IF SWALLOWED : Immediately call a POISON CENTER or doctor.

P305+P351+P338: IF IN EYES : Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue rinsing.

P304+P340: IF INHALED : Remove to fresh air and keep at rest in a position comfortable for breathing.

P337+P313: If eye irritation persists: Get medical advice/attention.

**• Storage**

: P403+P233: Store in well-ventilated place. Keep container tightly closed.

P405: Store locked up.

**• Disposal considerations**

: P501: Dispose of this material and its container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

**2.3. Other hazards**

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#### 2. Hazards identification -DSD (continued)

**Other hazards** : The substance does not fulfil the criteria to be identified as PBT substance or vPvB substance according to Annex XIII of Regulation REACH.

#### 3. Composition/information on ingredients

**Substance / Preparation** : AMMONIUM - METAVANADATE 98%  
CAS No :7803-55-6  
Substance.

Contains no other components or impurities which will influence the classification of the product.

#### 4. First aid measures

##### 4.1. Description of first aid measures

**Inhalation** : Remove to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor if you feel unwell.

**Skin contact** : Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse.

**Eye contact** : Get medical advice. If eye irritation persists : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

**Ingestion** : Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER or doctor. Specific treatment (see on this label).

##### 4.2. Most important symptoms and effects, both acute and delayed

**Symptoms relating to use** : Swallowing a small quantity of this material will result in serious health hazard. Danger of serious damage to health by prolonged exposure through inhalation. Causes serious eye irritation. May cause respiratory irritation.

##### 4.3. Indication of any immediate medical attention and special treatment needed

**General information** : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

#### 5. Fire-fighting measures

##### 5.1. Extinguishing media

**Suitable extinguishing media** : Foam. Dry powder. Carbon dioxide. Water spray. Sand.

**Unsuitable extinguishing media** : Do not use a heavy water stream.

**Surrounding fires** : Use water spray or fog for cooling exposed containers.

##### 5.2. Special hazards arising from the substance or mixture

## MATERIAL SAFETY DATA SHEET (MSDS)

### AMMONIUM METAVANADATE LR (AMMONIUM MONOVANADATE)

#### 5. Fire-fighting measures (continued)

**Hazardous combustion products** : Under fire conditions, hazardous fumes will be present.

##### 5.3. Advice for fire-fighters

**Protection against fire** : Do not enter fire area without proper protective equipment, including respiratory protection.

**Special procedures** : Exercise caution when fighting any chemical fire. Avoid (reject) fire-fighting water to enter environment.

#### 6. Accidental release measures

##### 6.1. Personal precautions, protective equipment and emergency procedures

**For emergency responders** : Equip cleanup crew with proper protection. Ventilate area.

**For non-emergency personnel** : Evacuate unnecessary personnel.

##### 6.2. Environmental precautions

**Environmental precautions** : Prevent entry to sewers and public waters. Notify authorities if product enters sewers or public waters.

##### 6.3. Methods and material for containment and cleaning up

**Clean up methods** : On land, sweep or shovel into suitable containers. Minimize generation of dust. Store away from other materials.

##### 6.4. Reference to other sections

See section 8. Exposure controls/personal protection

#### 7. Handling and storage

##### 7.1. Precautions for safe handling

**Handling** : Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Use only outdoors or in a well-ventilated area. Avoid breathing dust, fume, gas, mist, vapours, spray.

**Technical protective measures** : Provide good ventilation in process area to prevent formation of vapour.

**Special precautions** : Avoid breathing dust, fume, gas, mist, vapours, spray.

##### 7.2. Conditions for safe storage, including any incompatibilities

**MATERIAL SAFETY DATA SHEET (MSDS)**
**AMMONIUM METAVANADATE LR (AMMONIUM MONOVANADATE)**
**7. Handling and storage (continued)**

**Storage** : Keep only in the original container in a cool, well ventilated place. Keep container tightly closed.

**Storage - away from** : Strong bases. Strong acids. Sources of ignition. Direct sunlight.

**7.3. Specific end use(s)**

**Specific end use(s)** : None.

**8. Exposure controls/personal protection**
**8.1. Exposure controls**

**Personal protection** : Avoid all unnecessary exposure.

- **Respiratory protection** : In case of insufficient ventilation, wear suitable respiratory equipment.
- **Hand protection** : Wear protective gloves.
- **Eye protection** : Chemical goggles or safety glasses.
- **Others** : When using, do not eat, drink or smoke.

**8.2. Control parameters**

**Occupational Exposure Limits** : No data available.

**9. Physical and chemical properties**
**9.1. Information on basic physical and chemical properties**

**Physical state at 20 °C** : Solid.

**Colour** : White or yellowish-white

**Odour** : Odorless

**Odour threshold** : No data available.

**pH value** : Not applicable.

**Melting point [°C]** : 2000C

**Decomposition point [°C]** : N/A

**Critical temperature [°C]** : N/A

**Auto-ignition temperature [°C]** : N/A

**Flammability (solid, gas)** : N/A

**Flash point [°C]** : N/A

**Boiling point [°C]** : N/A

**Initial boiling point [°C]** : N/A

**Final boiling point [°C]** : N/A

**MATERIAL SAFETY DATA SHEET (MSDS)**
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**9. Physical and chemical properties (continued)**

Evaporation rate	: N/A
Vapour pressure [20°C]	: N/A
Vapour pressure mm/Hg	: N/A
Vapour density	: N/A
Density [g/cm <sup>3</sup> ]	: N/A
Relative density, gas (air=1)	: N/A
Relative density, liquid (water=1)	: N/A
Solubility in water [% weight]	: Slight (0.1-1%)
Solubility in water	: N/A
Log Pow octanol / water at 20°C	: No data available.
Solubility	: N/A
Viscosity at 40°C [mm <sup>2</sup> /s]	: N/A

**9.2. Other information**

Explosive properties	: N/A
Explosion limits - upper [%]	: N/A
Explosion limits - lower [%]	: N/A
Oxidising properties	: No data available.

**10. Stability and reactivity**
**10.1. Reactivity**

Reactivity	: Not established.
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**10.2. Chemical stability**

Chemical stability	: Stable under recommended storage conditions.
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**10.3. Possibility of hazardous reactions**

Hazardous reactions	: Not established.
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**10.4. Conditions to avoid**

Conditions to avoid	: Direct sunlight. Extremely high or low temperatures.
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**10.5. Incompatible materials**

Materials to avoid	: Strong acids. Strong bases.
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**10.6. Hazardous decomposition products**

**MATERIAL SAFETY DATA SHEET (MSDS)**
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**10. Stability and reactivity (continued)**

**Hazardous decomposition products** : Fumes. Carbon monoxide. Carbon dioxide.

**11. Toxicological information**
**11.1. Information on toxicological effects**
**Acute toxicity**

- **Inhalation** : Harmful if inhaled.
- **Dermal** : Based on available data, the classification criteria are not met.
- **Ingestion** : Toxic if swallowed.

**Corrosion** : Based on available data, the classification criteria are not met.

**Irritation** : Causes serious eye irritation.  
May cause respiratory irritation.

**Sensitization** : Based on available data, the classification criteria are not met.

**Mutagenicity** : Based on available data, the classification criteria are not met.

**Carcinogenicity** : Based on available data, the classification criteria are not met.

**Toxic for reproduction** : Based on available data, the classification criteria are not met.

**STOT-single exposure** : Based on available data, the classification criteria are not met.

**STOT-repeated exposure** : Based on available data, the classification criteria are not met.

**Aspiration hazard** : Based on available data, the classification criteria are not met.

**12. Ecological information**
**12.1. Toxicity**

**Toxicity information** : Not established.

**12.2. Persistence - degradability**

**Persistence - degradability** : Biodegradable.

**12.3. Bioaccumulative potential**

**Bioaccumulative potential** : Not established.

**12.4. Mobility in soil**

**Mobility in soil** : Not established.

**12.5. Results of PBT and vPvB assessment**

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**12. Ecological information (continued)**

**Results of PBT and vPvB assessment** : The substance does not fulfil the criteria to be identified as PBT substance or vPvB substance according to Annex XIII of Regulation REACH.

**12.6. Other adverse effects**

**Environmental precautions** : Avoid release to the environment.

**13. Disposal considerations**
**13.1. Waste treatment methods**

**General** : Avoid release to the environment. Dispose in a safe manner in accordance with local/national regulations.  
 Dispose of this material and its container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

**Special precautions** : Hazardous waste due to toxicity.

**14. Transport information**
**14.1. Land transport (ADR-RID)**

**Proper shipping name** : AMMONIUM METAVANADATE  
**UN N°** : 2859  
**H.I. nr** : 60  
**ADR - Class** : 6.1  
**Labelling - Transport** : 6.1 : Toxic substances.



**ADR - Classification code** : T5  
 T5  
**ADR - Group** : II  
**ADR - Packing instructions** : P002  
**ADR - Limited Quantity** : 500 G  
**ADR - Tunnel code**



: D/E : Bulk or tank carriage: Passage forbidden through tunnels of category D and E. Other carriage: Passage forbidden through tunnels of category E.



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**14. Transport information (continued)**
**14.2. Sea transport (IMDG) [English only]**

Proper shipping name	: AMMONIUM METAVANADATE
UN N°	: 2859
IMO-IMDG - Class or division	: 6.1 : Toxic substances.
IMO-IMDG - Packing group	: II
IMO-IMDG - Packing instructions	: P002
IMO-IMDG - Limited quantities	: 500 g
IMO-IMDG - Marine pollution	: No
EMS-Nr	: F-A S-A

**14.3. Air transport (ICAO-IATA) [English only]**

Proper shipping name	: AMMONIUM METAVANADATE
UN N°	: 2859
IATA - Class or division	: 6.1 : Toxic substances.
IATA - Packing group	: II
IATA - Passenger and Cargo Aircraft	: ALLOWED
- Passenger and Cargo - Packing instruction	: 669
- Passenger and Cargo - Maximum Quantity/Packing	: 25 kg
IATA - Cargo only	: ALLOWED
- Cargo only - Packing instruction	: 676
- Cargo only - Maximum Quantity/Packing	: 100 kg
IATA - Limited Quantities	: 1 kg
ERG-Nr	: 6L

**15. Regulatory information**
**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**

Safety, health and environmental regulations/legislation specific for the substance or mixture	: Ensure all national/local regulations are observed.
REACH Restrictions - Annex XVII	: The components of this product are not subject to restrictions.
REACH Authorisation - Annex XIV	: The components of this product are not subject to authorization.

**15.2. Chemical Safety Assessment**

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**15. Regulatory information (continued)**

**Chemical Safety Assessment** : It has not been carried out.

**16. Other information**

**Revision** : Revision - See : \*

**Abbreviations and acronyms** : PBT: persistent, bioaccumulative and toxic.  
vPvB: very persistent and very bioaccumulative

**Sources of key data used** : REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006

**Further information** : None.

In accordance with REACH Regulation (CE) N° 1907/2006 and with CLP Regulation (CE) N° 1272/2008

**DISCLAIMER:**

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- **SUVCHEM** shall not be responsible for any damage resulting from handling or from contact with the above product.
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