

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 : A0024500500

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



MATERIAL SAFETY DATA SHEET (MSDS)

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).

<u>Labelling Regulation EC 1272/2008 (CLP)</u>

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



MATERIAL SAFETY DATA SHEET (MSDS)

AMMONIUM METAVANADATE LR (AMMONIUM MONOVANADATE)

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 : Avo

: 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 : N/A Critical temperature [°C] Auto-ignition temperature [°C] : N/A : N/A Flammability (solid, gas) : N/A Flash point [°C] **Boiling point [°C]** : N/A : N/A Initial boiling point [°C] : N/A Final boiling point [°C]



MATERIAL SAFETY DATA SHEET (MSDS)

AMMONIUM METAVANADATE LR (AMMONIUM MONOVANADATE)

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/cm3] : 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 [mm2/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.

10.2. Chemical stability

Chemical stability : Stable under recommended storage conditions.

10.3. Possibility of hazardous reactions

Hazardous reactions : Not established.

10.4. Conditions to avoid

Conditions to avoid : Direct sunlight. Extremely high or low temperatures.

10.5. Incompatible materials

Materials to avoid : Strong acids. Strong bases.

10.6. Hazardous decomposition products



MATERIAL SAFETY DATA SHEET (MSDS)

AMMONIUM METAVANADATE LR (AMMONIUM MONOVANADATE)

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



MATERIAL SAFETY DATA SHEET (MSDS)

AMMONIUM METAVANADATE LR (AMMONIUM MONOVANADATE)

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.

: Hazardous waste due to toxicity. Special precautions

14. Transport information

14.1. Land transport (ADR-RID)

: AMMONIUM METAVANADATE Proper shipping name

: 2859 UN N° H.I. nr : 60 : 6.1 **ADR - Class**

: 6.1 : Toxic substances. **Labelling - Transport**

ADR - Classification code : T5

> T5 : 11

ADR - Group

: P002 **ADR - Packing instructions** : 500 G **ADR - Limited Quantity**

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.



MATERIAL SAFETY DATA SHEET (MSDS)

AMMONIUM METAVANADATE LR (AMMONIUM MONOVANADATE)

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 : ||

IATA - Passenger and Cargo Aircraft : ALLOWED

- Passenger and Cargo - Packing : 669

instruction

- Passenger and Cargo - Maximum : 25 kg

Quantity/Packing

- Cargo only - Packing instruction : 676

- Cargo only - Maximum Quantity/

Packing

IATA - Limited Quantites : 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: Ensure all national/local regulations are observed.

regulations/legislation specific for the

substance or mixture

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



MATERIAL SAFETY DATA SHEET (MSDS)

AMMONIUM METAVANADATE LR (AMMONIUM MONOVANADATE)

15. Regulatory information (continued)

Chemical Safety Assessment : It has not been carried out.

16. Other information

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) No 1907/2006 and with CLP Regulation (CE) No 1272/2008

DISCLAIMER:

- SUVCHEM Products are to be used as Lab Chemicals for R&D only. Not for drug, medicinal, household or other uses.
- **SUVCHEM** shall not be responsible for any damage resulting from handling or from contact with the above product.
- **SUVCHEM** provides the information contained herein in good faith but makes no representation as to its comprehensiveness or accuracy. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product.

End of document

Page: 10