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

# 1.1. Product identifier

**Trade name:** AMMONIUM METAVANADATE

**Product code**: 21660

**Identification of the product**: AMMONIUM - METAVANADATE

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**: MOLYCHEM

Office: 78/80 Babu Genu Road, Souri Bldg., 2nd Floor, Mumbai – 400 002 (INDIA) Tel:

+91 22 4066 8111, 2205 7772 . Fax: +91 22 2203 4442.

Email: info@molychem.net

Works: Plot No. B/9, Badlapur M.I.D.C., OPP. Shobhavat Textile Co.,

Kulgaon, Badlapur (E), Dist.-Thane-421 503.

# 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

**Symbol(s)**: T : Toxic



**R Phrase**(s): R20: Harmful by inhalation.

R25 : Toxic if swallowed. R36 : Irritating to eyes.

R37: Irritating to respiratory system.

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**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

**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.

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# 3. Composition/information on ingredients

**Substance / Preparation : AMMONIUM - METAVANADATE** 

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

**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.

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#### 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

**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.

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### 9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state at 20 °C : Solid.

**Odour threshold**: No data available.

**pH value**: Not applicable. Melting point [ $^{\circ}$ C] : 200 $^{\circ}$ C **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

**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.

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# 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** 

**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

**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.

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# 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.

LÉ

**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.

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  $N^{\circ}$ : 2859

**IATA - Class or division**: 6.1: Toxic substances.

**IATA - Packing group** : II

IATA - Passenger and Cargo Aircraft : ALLOWED

- Passenger and Cargo - Packing: 669

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#### instruction

- Passenger and Cargo - Maximum: 25 kg

**Quantity/Packing** 

IATA - Cargo only: ALLOWED

- Cargo only - Packing instruction : 676- Cargo only - Maximum Quantity/ : 100 kg

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

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

## 16. Other information

**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.

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This MSDS was prepared and is to be used only for this product. If the product is used as a component in another product, this MSDS information may not be applicable.

# End of document

**Prepared by: MOLYCHEM (INDIA)** 

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