

Product Name	Ammonium metavanadate
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## **SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING**

### **1.1 Product Identification:**

**Product Description:** Ammonium metavanadate

**Synonyms:** Ammonium trioxovanadate, Ammonium (meta)vanadate

**CAS-No:** 7803-55-6

**EC-No.:** 232-261-3

**Molecular Formula:** H<sub>4</sub>NO<sub>3</sub>V

**REACH Registration No:** A registration number is not available for this substance as the substance or its uses are exempted from registration, the annual tonnage does not require a registration, or the registration is envisaged for a later registration deadline.

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

**Identified Uses:** Laboratory chemicals, Used as Bio Pharma Ingredient

### **1.3 Details of the supplier of the safety data sheet:**

- **Company** **Finar Limited**  
184-186/P, Chacharwadi Vasna,  
Sarkhej-Bavla Highway,  
Ta.: Sanand, Dist.: Ahmedabad - 382110, Gujarat, India  
Web: [www.finarchemicals.com](http://www.finarchemicals.com)
- **E-mail Address** [safety.finar@actylis.com](mailto:safety.finar@actylis.com); [info.finar@actylis.com](mailto:info.finar@actylis.com)

### **1.4 Emergency telephone number:**

- For Emergency contact No: +91 - 2717 - 616 717

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## **SECTION 2: HAZARDS IDENTIFICATION**

### **2.1 Classification of the substance or mixture:**

#### **Classification according to Regulation (EC) No 1272/2008**

Acute toxicity, Oral (Category 3), H301

Acute toxicity, Inhalation (Category 4), H332

Eye irritation (Category 2), H319

Specific target organ toxicity - repeated exposure, Inhalation (Category 1), Respiratory Tract, H372

Long-term (chronic) aquatic hazard (Category 2), H411

For the full text of the H-Statements mentioned in this Section, see Section 16.

### **2.2 Label elements:**

#### **Labelling according Regulation (EC) No 1272/2008**

##### **Pictogram**



**Signal Word:**    **Warning**

##### **Hazard Statements:**

H301 - Toxic if swallowed

H319 - Causes serious eye irritation

H332 - Harmful if inhaled

H372 - Causes damage to organs (Respiratory Tract) through prolonged or repeated exposure if inhaled

H411 - Toxic to aquatic life with long lasting effects

H330 – Acute toxicity (inhale)

##### **Precautionary Statements:**

P273: Avoid release to the environment

P301 + P310 + P330 IF SWALLOWED: Immediately call a POISON CENTER/doctor. Rinse mouth.

P304 + P340 + P312 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/doctor if you feel unwell.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P314 Get medical advice/ attention if you feel unwell.

**Supplemental Hazard Information (EU):** None

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### 2.3 Other hazards:

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

## **SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS**

### 3.1 Substances: Ammonium metavanadate

### 3.2 Mixtures:

Component	CAS-No	EC-No.	Weight %
Ammonium metavanadate	7803-55-6	232-261-3	> 98 %

## **SECTION 4: FIRST AID MEASURES**

### 4.1 Description of first aid measures:

- **General advice:** Consult a physician. Show this safety data sheet to the doctor in attendance.
- **If inhaled:** If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.
- **In case of skin contact:** Wash off with soap and plenty of water. Take victim immediately to hospital. Consult a physician.
- **In case of eye contact:** Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.
- **If swallowed:** Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

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

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11.

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

No data available

## **SECTION 5: FIREFIGHTING MEASURES**

### 5.1 Extinguishing media:

**Suitable extinguishing media:** Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

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

Nitrogen oxides (NO<sub>x</sub>), Vanadium/vanadium oxides

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**5.3 Advice for firefighters:**

Wear self-contained breathing apparatus for firefighting if necessary.

**5.4 Further Information:**

Suppress (knock down) gases/vapors/mists with a water spray jet. Prevent fire extinguishing water from contaminating surface water or the ground water system.

## **SECTION 6: ACCIDENTAL RELEASE MEASURES**

**6.1 Personal precautions, protective equipment and emergency procedures:**

Advice for non-emergency personnel: Avoid generation and inhalation of dusts in all circumstances. Avoid substance contact. Ensure adequate ventilation. Evacuate the danger area, observe emergency procedures, consult an expert.

For personal protection see section 8.

**6.2 Environmental precautions:**

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

**6.3 Methods and material for containment and cleaning up:**

Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

**6.4 Reference to other sections:**

For disposal see section 13

## **SECTION 7: HANDLING AND STORAGE**

**7.1 Precautions for safe handling:**

Avoid contact with skin and eyes. Avoid formation of dust and aerosols.

Provide appropriate exhaust ventilation at places where dust is formed.

For precautions see section 2.2.

**7.2 Conditions for safe storage, including any incompatibilities:**

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

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

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated.

## **SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

**8.1 Control parameters:**

Components with workplace control parameters

**8.2 Exposure controls:**

**Appropriate engineering controls**

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Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product.

**Personal protective equipment:**

**Eye Protection:**

Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

**Skin Protection:**

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

The selected protective gloves have to satisfy the specifications of Regulation (EU) 2016/425 and the standard EN 374 derived from it.

**Full contact:**

Material: Nitrile rubber

Minimum layer thickness: 0.11 mm

Break through time: 480 min

Material tested: Dermatrill® (KCL 740 / Aldrich Z677272, Size M)

**Splash contact**

Material: Nitrile rubber

Minimum layer thickness: 0.11 mm

Break through time: 480 min

Material tested: Dermatrill® (KCL 740 / Aldrich Z677272, Size M)

If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

**Body Protection:**

Complete suit protecting against chemicals, the type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

**Respiratory protection:**

Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N99 (US) or type P2 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

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**Control of environmental exposure:**

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

**SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES****9.1 Information on basic physical and chemical properties:**

- **Appearance:** Solid, Colourless
- **Odor:** Odourless
- **Odor Threshold:** No data available
- **pH:** 7 at 5.1 g/l at 20 °C
- **Melting Point/Freezing Point:** 200 °C (decomposition)
- **Initial Boiling point and Boiling range:** Not applicable
- **Flash Point:** Does not flash
- **Evaporation Rate:** No data available
- **Flammability (Solid, Gas):** The product is not flammable
- **Upper/lower flammability or explosive limits:** No data available
- **Vapor Pressure:** No data available
- **Vapor Density:** No data available
- **Relative Density:** 2.32 g/cm<sup>3</sup> at 20 °C
- **Water Solubility:** 7.81 g/l at 20 °C
- **Partition coefficient:** No data available
- **Autoignition Temperature:** No data available
- **Decomposition Temperature:** > 150 °C -
- **Viscosity Viscosity, Kinematic:** No data available Viscosity, dynamic: No data available
- **Explosive Properties:** No data available
- **Oxidizing Properties:** No data available

**9.2 Other information:**

**Molecular Formula:** H<sub>4</sub>NO<sub>3</sub>V

**Molecular Weight:** 116.98 g/mol

**SECTION 10: STABILITY AND REACTIVITY****10.1 Reactivity:**

No data available

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### 10.2 Chemical stability:

The product is chemically stable under standard ambient conditions (room temperature)

### 10.3 Possibility of hazardous reactions:

No data available

### 10.4 Conditions to avoid:

No data available

### 10.5. Incompatible materials:

Strong oxidizing agents

### 10.6. Hazardous decomposition products:

Other decomposition products - No data available

Hazardous decomposition products formed under fire conditions. - Nitrogen oxides (NO<sub>x</sub>),

Vanadium/vanadium oxides (In the event of fire: see section 5)

## **SECTION 11: TOXICOLOGICAL INFORMATION**

### 11.1 Information on toxicological effects:

#### **Acute Oral toxicity**

LD50 Oral - Rat - 169 mg/kg

(OECD Test Guideline 401)

LC50 Inhalation - Rat - 4 h – 2.5 mg/l

(OECD Test Guideline 403)

LD50 Dermal - Rat - > 2.500 mg/kg

(OECD Test Guideline 402)

LD50 Intraperitoneal - Rat - 18 mg/kg

#### **Skin corrosion/irritation**

Skin - Rabbit

Result: No skin irritation - 4 h

(OECD Test Guideline 404)

#### **Serious eye damage/eye irritation**

Eyes - Rabbit

Result: Eye irritation

(OECD Test Guideline 405)

#### **Sensitization**

No data available

#### **Germ cell mutagenicity**

No data available

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**Carcinogenicity**

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

**Reproductive toxicity**

No data available

**Specific target organ toxicity - single exposure**

No data available

**Specific target organ toxicity - repeated exposure**

Inhalation - Causes damage to organs through prolonged or repeated exposure.

Respiratory Tract No data available

**Aspiration hazard**

No data available

**11.2 Additional Information:**

RTECS: YW0875000

Headache, Tremors, To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

## **SECTION 12: ECOLOGICAL INFORMATION**

**12.1 Toxicity:**

**Toxicity to fish:** LC50 - Ictalurus catus (catfish) - 2.6 mg/l - 96 h

Remarks: (ECOTOX Database)

**Toxicity to daphnia and other aquatic invertebrates:** No data available

**Toxicity to algae:** No data available

**Toxicity to bacteria:** No data available

**12.2 Persistence and degradability Persistence:**

No data available

**12.3 Bio accumulative potential:**

No data available

**12.4 Mobility in soil:**

No data available

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

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

**12.6 Other adverse effects:**

Toxic to aquatic life with long lasting effects. No data available



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### **SECTION 13: DISPOSAL CONSIDERATIONS**

#### **13.1 Waste treatment methods:**

##### **Product**

Offer surplus and non-recyclable solutions to a licensed disposal company. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber. Waste material must be disposed of in accordance with the Directive on waste 2008/98/EC as well as other national and local regulations. Leave chemicals in original containers. No mixing with other waste. Handle uncleaned containers like the product itself.

##### **Contaminated packaging**

Dispose of as unused product.

### **SECTION 14: TRANSPORT INFORMATION**

	Land transport (ADR/RID)	Air transport (IATA)	Sea transport (IMDG)
<b>14.1 UN number</b>	2859		
<b>14.2 Proper shipping name</b>	AMMONIUM METAVANADATE		
<b>14.3 Class</b>	6.1		
<b>14.4 Packing group</b>	II		
<b>14.5 Environmentally hazardous</b>	No		
<b>14.6 Special precautions for user</b>	No data available		
<b>14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code</b>	Not Relevant		

### **SECTION 15: REGULATORY INFORMATION**

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

This safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006.

##### **National legislation**

Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances.

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E2 Environmental Hazards

**Other regulations**

Observe work restrictions regarding maternity protection in accordance to Dir 92/85/EEC or stricter national regulations where applicable.

Take note of Dir 94/33/EC on the protection of young people at work.

**15.2 Chemical safety assessment:**

For this product, a chemical safety assessment is not carried out.

**SECTION 16: OTHER INFORMATION**

• **Full text of H-Statements referred to under sections 2 and 3:**

H301 Toxic if swallowed

H319 Causes serious eye irritation

H332 Harmful if inhaled

H372 Causes damage to organs through prolonged or repeated exposure if inhaled

H411 Toxic to aquatic life with long lasting effects.

**References:** Not available

**Created On:** 30/07/2021

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