

Revision: 2.0
(Replaces revision 1.1 of 16 April 2021)Revision date: 19 April 2021
Date printed: 12 August 2023**Section 1. Identification****1.1 Product Identifier** 0838

Product Name AMMONIUM METAVANADATE pure

CAS Number 7803-55-6

REACH Registration No A registration number is not available as the substance or its uses are exempt, the annual tonnage does not require a registration or the registration is envisaged for a later date.

Molecular Formula $\text{NH}_4\text{VO}_3 = 116.98$

1.2 Relevant identified uses of the substance or mixture & uses advised against

Uses of Material Chemical for industrial and laboratory use. Not suitable for domestic use.

1.3 Supplier Vickers Laboratories Ltd

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(Have this document to hand)**Section 2. Hazards Identification****2.1 Classification of the substance or mixture****Classification according to regulation 1272/2008/EC**

Acute toxicity, category 3 (oral)	H301: Toxic if swallowed.
Acute toxicity, category 4 (inhalation)	H332: Harmful if inhaled.
Serious eye damage/irritation, category 2	H319: Causes serious eye irritation.
Reproductive toxicity, category 2	H361: Suspected of damaging fertility or the unborn child.
Spec target organ tox - repeat, category 1	H372: Causes damage to organs through prolonged or repeated exposure.
Hazard to aquatic environment, category 2	H411: Toxic to aquatic life with long lasting effects.

2.2 Label elements**Labelling according to regulation 1272/2008/EC**

Signal word Danger

Hazard Pictograms



Hazard Statements Toxic if swallowed. Harmful if inhaled. Causes serious eye irritation. Suspected of damaging fertility or the unborn child. Causes damage to organs through prolonged or repeated exposure. Toxic to aquatic life with long lasting effects.

Precautionary Statements Use personal protective equipment as required. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Do not breathe dust. **IF SWALLOWED:** Immediately call a POISON CENTER or doctor/physician. **IF IN EYES:** Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do and continue rinsing.

Section 3. Composition

3.1 Substances

Component	CAS No.	EEC No.	REACH No.	Conc w/w	CLP Classification (1272/2008/CE)
Ammonium metavanadate	7803-55-6	232-261-3		>99.8%	Acute Tox. 3 (O), Acute Tox. 4 (I), Eye Irrit. 2, Repr. 2, STOT RE 1, Aquatic Chronic 2

Section 4. First Aid

4.1 Description of first aid measures

Eyes	Irrigate thoroughly with plenty of water for at least 10 minutes, holding the eye open. OBTAIN MEDICAL ATTENTION.
Skin	If calcium gluconate gel is available immediately rub into all affected areas and massage until pain goes. If not wash with soap and water for 30 minutes. OBTAIN MEDICAL ATTENTION.
Inhalation	Remove from exposure. If there is difficulty in breathing give oxygen if available. If breathing stops or shows signs of failing, apply artificial resuscitation. OBTAIN MEDICAL ATTENTION.
Ingestion	If conscious give plenty of water to drink. Keep warm and at rest. Do not induce vomiting. OBTAIN MEDICAL ATTENTION URGENTLY.
Personal protection for first aiders	Wear protective gloves / eye protection.

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

No further relevant information available.

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

No further relevant information available.

Section 5. Fire Fighting

5.1 Extinguishing media

Extinguishing Media	Water spray.
Unsuitable Media	Nothing specified.

5.2 Special hazards arising from the substance or mixture

Hazards	May evolve toxic fumes if involved in a fire.
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5.3 Advice for firefighters

Advice for firefighters	Evacuate area immediately. Keep up wind. Avoid exposure to toxic vapours and fumes. Fire-fighters should wear protective clothing and breathing apparatus.
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Section 6. Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal Protection Evacuate area immediately. Only re-enter area with full protective clothing and breathing apparatus.

6.2 Environmental precautions

Environmental Keep material out of sewers, storm drains, surface waters and soil. Notify the Environmental Agency and local Environmental Health Officer if major spillage occurs.

6.3 Methods and material for containment and cleaning up

Major Spillage Shovel/sweep up into container for removal Cover area of spill with calcium hydroxide then wash to drain with copious amounts of water.

Minor Spillage Cover area of spill with calcium hydroxide then wash to drain with copious amounts of water.

6.4 Reference to other sections

See section 8.2 for information on protective equipment and section 13 for information on disposal.

Section 7. Storage & Handling

7.1 Precautions for safe handling

Avoid contact with skin and eyes. Do not breath dust. Do not allow to contaminate clothing.

Ensure Local Exhaust Ventilation maintains dust concentrations to a minimum.

7.2 Conditions for safe storage, including any incompatibilities

Well ventilated, cool, dry storage .

7.3 Specific end use(s)

See section 1.2.

Section 8. Workplace Exposure & Personal Protection

8.1 Control parameters

Component	CAS No	Concentration	Workplace Exposure Limits	
			Long Term (8hr TWA)	Short Term 15min period
Ammonium metavanadate	7803-55-6	>99.8%	-	-

Exposure data source(s) No occupational exposure data currently available.

8.2 Exposure controls

Respiratory Protection Use L.E.V. or natural ventilation to maintain dust concentrations below exposure limits.

Hand Protection Wear gloves.

Eye Protection Use tightly fitting chemical splash proof glasses or goggles.

Skin Protection Avoid contact with skin. If skin contact or contamination of clothing is likely, protective clothing must be worn.

Special Hazards No special precautions required.

Section 9. Physical & Chemical Properties

9.1 Information on basic physical and chemical properties

Appearance Fine dry white powder.
Odour Odourless.
pH 6 @20 °C (7.8 g/L)
Boiling Point Not available
Melting Point 200 °C (decomposition)
Flash Point Not applicable
Upper Flammable Limit Not applicable
Lower Flammable Limit Not applicable
Auto Ignition Not applicable

Explosive Properties	No.
Oxidising Properties	No.
Vapour Pressure	Not applicable
Relative Density	2.3200
Water Solubility	7.8 g/L

9.2 Other information

No data available.

Section 10. Stability & Reactivity

10.1 Reactivity	No data available.
10.2 Chemical Stability	Stable under normal conditions
10.3 Possibility of hazardous reactions	No data available.
10.4 Conditions to Avoid	Avoid ingress of water and contact with acids.
10.5 Incompatible Materials	Acids.
10.6 Hazardous Decomposition Products	May produce hazardous fumes if involved in a fire.

Section 11. Toxicological Information

11.1 Information on toxicological effects

Eyes	Risk of serious damage to eyes. The solid and solutions will produce conjunctival irritation and corneal damage.
LD50 Skin	>2500 mg/Kg Rat
Ingestion	Toxic if swallowed.
LD50 Oral	169.33 mg/Kg Rat
Inhalation	May be harmful if inhaled. May cause damage to organs through prolonged or repeated exposure. May cause respiratory irritation.
LD50 Inhalation	2.51 mg/L air Rat
TCLo	Not available
Carcinogenicity	No information is available but unlikely to be a carcinogen.
Mutagenicity	No information is available.
Reproductive Effects	Suspected of damaging fertility or the unborn child.

Section 12. Ecological

12.1 Toxicity	Small amounts present no specific environmental hazard.
LC50 Algal	2907 µg/L Green algae (72 hours)
LC50 Crustacea	1520 µg V/L Daphnia magna (48 hours)
LC50 Fish	693 µg V/L Ide (leuciscus idus) (96 hours)
12.2 Persistence and degradability	No data available.
12.3 Bioaccumulative potential	No data available.
12.4 Mobility in soil	No data available.
12.5 Results of PBT & vPvB assessment	Assessment not required.
12.6 Other adverse effects	None known at present.

Section 13. Disposal Considerations

13.1 Waste treatment methods

Disposal Methods	Dispose of via an authorised waste disposal contractor to an approved waste disposal site, observing all local and national regulations.
Contaminated Packaging	Use a licensed waste disposer.

Section 14. Transport Information

14.1 UN Number	2859
14.2 Proper Shipping Name	Ammonium metavanadate
14.3 Transport classes	
UN classification	6.1
Subsidiary hazard(s)	None
Transport category	2
ADR Hazard ID	60
Tunnel Restriction Code	D/E
14.4 Packing Group	II
14.5 Environment hazards	See section 12.
14.6 Special precautions for user	No special precautions required.
14.7 Transport in bulk	Not transported in bulk.



Section 15. Regulatory Information

15.1 Safety, health and environment regulations specific for substance/mixture.

Classification, Labeling & Packaging of Substances & Mixtures Regulations (1272/2008/CE)

Classification	Acute toxicity, category 3 (oral); Acute toxicity, category 4 (inhalation); Serious eye damage/irritation, category 2; Reproductive toxicity, category 2; Spec target organ tox - repeat, category 1; Hazard to aquatic environment, category 2
Signal word	Danger
Hazard Pictograms	
Hazard Statements	H301, H332, H319, H361, H372, H411 Toxic if swallowed. Harmful if inhaled. Causes serious eye irritation. Suspected of damaging fertility or the unborn child. Causes damage to organs through prolonged or repeated exposure. Toxic to aquatic life with long lasting effects.
Precautionary Statements	P281, P264, P270, P260, P301+P310, P305+P351+P338 Use personal protective equipment as required. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Do not breathe dust. IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do and continue rinsing.

15.2 Chemical safety assessment

Assessment not required.

Section 16. Other Information

The information contained in this document only covers the hazards presented by this material, it DOES NOT constitute a workplace risk assessment. See sections 11 for toxicological information and section 12 for ecological information.

Revision number: 2.0 (Supersedes revision 1.1)

Revision date: 19 April 2021

Reviewed by chemist: 19 April 2021

Printed date: 12 August 2023

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