SAFETY DATA SHEET
ACID AMMONIUM MOLYBDATE

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier
Product name  ACID AMMONIUM MOLYBDATE

1.2. Relevant identified uses of the substance or mixture and uses advised against
Identified uses  Test kit reagent
Uses advised against  Not for direct contact with Food or Beverage stuffs. Not for oral consumption.

1.3. Details of the supplier of the safety data sheet
Supplier  Holchem Laboratories Limited
Gateway House, Pilsworth Road,
Pilsworth Industrial Estate,
Bury, Lancashire (UK)
BL9 8RD

+44 (0) 1706 222288
+44 (0) 1706 221550
info@holchem.co.uk

1.4. Emergency telephone number
Emergency telephone  Holchem (Office Hours): Tel. 01706 222288  Fax. 01706 221550 Holchem (Outside Office Hours): Tel. 07050 265597 This product is registered with the NPIS.

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture
Classification
Physical hazards  Not Classified
Health hazards  Skin Irrit. 2 - H315 Eye Irrit. 2 - H319
Environmental hazards  Not Classified

2.2. Label elements
Pictogram

!

Signal word  Warning
Hazard statements  H315 Causes skin irritation.
H319 Causes serious eye irritation.
ACID AMMONIUM MOLYBDATE

Precautionary statements
P264 Wash contaminated skin thoroughly after handling.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P302+P352 IF ON SKIN: Wash with plenty of water.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P313 Get medical advice/attention.

2.3. Other hazards
This product does not contain any substances classified as PBT or vPvB.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

<table>
<thead>
<tr>
<th>SULPHURIC ACID</th>
<th>1-5%</th>
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<tbody>
<tr>
<td>CAS number: 7664-93-9</td>
<td>EC number: 231-639-5</td>
</tr>
<tr>
<td>REACH registration number: 01-211-9458838-20</td>
<td></td>
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</tbody>
</table>

Classification
Skin Corr. 1A - H314

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

Composition comments
To the best of our knowledge, all of the substances used in this product are being supported for the relevant application in REACH.

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation
Remove affected person from source of contamination. Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. If breathing stops, provide artificial respiration. Get medical attention.

Ingestion
Do not induce vomiting. Rinse mouth thoroughly with water. Place unconscious person on the side in the recovery position and ensure breathing can take place. Get medical attention.

Skin contact
Remove contaminated clothing and rinse skin thoroughly with water. Continue to rinse for at least 15 minutes. Get medical attention. Get medical attention if any discomfort continues.

Eye contact
Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15 minutes and get medical attention.

Protection of first aiders
First aid personnel should wear appropriate protective equipment during any rescue.

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

General information
Prolonged contact may result in dryness of skin. Eye contact may result in redness and stinging discomfort.

Inhalation
Unlikely route of exposure. Inhalation of sprayed droplets may result in soreness of the throat, mouth and nose.

Ingestion
Unlikely route of exposure without deliberate abuse. There may be soreness and redness of mouth and throat. A soapy taste may be reported. May cause irritation/discomfort to mucous membranes. Similar but less severe symptoms will be seen if dilute chemical is ingested.

Skin contact
Prolonged or repeated contact with skin may cause irritation, redness and dermatitis. Use solutions may cause mild irritation, especially to open cuts and abrasions.

Eye contact
May cause redness and irritation (stinging sensation) to eyes.
ACID AMMONIUM MOLYBDATE

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

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media The product is non-combustible. Use fire-extinguishing media suitable for the surrounding fire.

5.2. Special hazards arising from the substance or mixture

Specific hazards The product is non-combustible. Corrosive gases or vapours. Sulphurous gases (SOx). Sulphuric acid (H2SO4). No unusual fire or explosion hazards noted.

5.3. Advice for firefighters

Protective actions during firefighting Use air respirator if substance is involved in a fire.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions Wear protective clothing as described in Section 8 of this safety data sheet.

6.2. Environmental precautions

Environmental precautions Large spillages or uncontrolled discharges into rivers or streams must be reported to the Environment Agency or other regulatory body.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up Wear suitable protective equipment, including gloves, goggles/face shield, respirator, boots, clothing or apron, as appropriate. Avoid the spillage or runoff entering drains, sewers or watercourses. Collect and place in suitable waste disposal containers and seal securely. For waste disposal, see Section 13.

6.4. Reference to other sections

Reference to other sections See sections 8, 12 & 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Usage precautions Avoid spilling. Avoid contact with skin and eyes. Wear suitable protective equipment for prolonged exposure and/or high concentrations of vapours, spray or mist. Read and follow manufacturer's recommendations.

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions Keep container tightly closed. Store between 0 and 40 Degrees C.

7.3. Specific end use(s)

Specific end use(s) Detergent, refer to Product Information Sheet for full details.

Usage description Use as instructed on the product information sheet. This product is suitable for use in food and beverage processing plants, but it is not designed for direct food contact.

SECTION 8: Exposure Controls/personal protection

8.1. Control parameters

Occupational exposure limits

SULPHURIC ACID

Long-term exposure limit (8-hour TWA): WEL 0.05 mg/m³
WEL = Workplace Exposure Limit
ACID AMMONIUM MOLYBDATE

Ingredient comments

WEL = Workplace Exposure Limits

8.2. Exposure controls

Protective equipment

Provide adequate general and local exhaust ventilation.

Appropriate engineering controls

The PPE indicated above is not a COSHH assessment. It represents PPE that should be considered during the manufacture, distribution, use and final disposal stages of this product’s life cycle. It is the responsibility of employers to conduct a COSHH/risk assessment to determine appropriate PPE levels. The information given below should be used to support this assessment. Where possible replace manual processes with automated or closed processes to minimise contact with the product.

Eye/face protection

The following protection should be worn: Chemical splash goggles.

Hand protection

Rubber (natural, latex). Neoprene. Polyvinyl chloride (PVC).

Other skin and body protection

Wear suitable protective clothing as protection against splashing or contamination.

Hygiene measures

Provide eyewash station and safety shower. Promptly remove non-impervious clothing that has become contaminated, provided it is not adhered to the skin.

Respiratory protection

No specific recommendations.

Environmental exposure controls

Do not allow the substance to contaminate surface water/ground water. See points 6, 12 & 13.

General Health and Safety Measures.

A full Risk Assessment should be carried out before handling any chemical(s). Risk Assessments should refer to COSHH, and any other relevant legislation or industry specific guidelines governing the use of chemicals.

SECTION 9: Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

Appearance

Clear liquid.

Colour

Colourless.

Odour

No characteristic odour.

pH

pH (concentrated solution): 1.4

Melting point

Not applicable.

Initial boiling point and range

Not applicable.

Flash point

Not applicable. Contains no Flammable Components

Evaporation rate

Not applicable.

Evaporation factor

Not applicable.

Flammability (solid, gas)

Not applicable.

Upper/lower flammability or explosive limits

Not applicable.
ACID AMMONIUM MOLYBDATE

Vapour pressure Not applicable.
Vapour density Not applicable.
Relative density 1.0 @ 20 Degree C @ °C
Bulk density Not applicable.
Solubility(ies) Soluble in water.
Partition coefficient Not applicable. Technically not feasible.
Auto-ignition temperature Not applicable.
Decomposition Temperature Not applicable.
Viscosity Not determined.
Explosive properties Not applicable.
Explosive under the influence of a flame Not considered to be explosive.
Oxidising properties Does not meet the criteria for classification as oxidising. Not applicable. Contains no Oxidising Components.

9.2. Other information
Refractive index Not applicable.
Particle size Not applicable.
Molecular weight Not applicable.
Volutility Not applicable.
Saturation concentration Not applicable.
Critical temperature Not applicable.
Volatile organic compound Not applicable.
Explosive Properties Not Classified as Explosive

SECTION 10: Stability and reactivity

10.1. Reactivity
Reactivity Not expected to react when correctly stored and used. Mixing with other chemicals may produce unexpected reactions.

10.2. Chemical stability
Stability Stable at normal ambient temperatures.

10.3. Possibility of hazardous reactions
Possibility of hazardous reactions Refer to section 10.1.

10.4. Conditions to avoid
Conditions to avoid Avoid excessive heat for prolonged periods of time.

10.5. Incompatible materials

10.6. Hazardous decomposition products
Hazardous decomposition products No specific hazardous decomposition products noted.
ACID AMMONIUM MOLYBDATE

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Respiratory sensitisation
No evidence of respiratory sensitisation for any component of this formulation.

Skin sensitisation
No evidence of skin sensitisation for any component of this formulation.

Carcinogenicity
The components of this formulation will not be systemically available in the body under normal conditions of handling. As a consequence it is not expected to cause cancer.

Reproductive toxicity
The components of this formulation will not be systemically available in the body under normal conditions of use and handling. As a consequence it is not expected to be toxic to the reproductive system or developing foetus.

General information
See section 4.2.

Inhalation
May cause respiratory system irritation.

Ingestion
May cause chemical burns in mouth, oesophagus and stomach.

Skin contact
Irritating to skin.

Eye contact
Irritating to eyes. Risk of serious damage to eyes.

SECTION 12: Ecological Information

12.1. Toxicity

Acute toxicity - fish
This mixture is not classified as toxic to aquatic organisms. Normal use of diluted product is unlikely to pose a risk. See note 12.0.

12.2. Persistence and degradability

Persistence and degradability
This product consists mainly of inorganic components for which biodegradation assessment is not applicable. The product meets the requirements of the European Detergents Regulation 648/2004 as amended.

12.3. Bioaccumulative potential

Bioaccumulative potential
No data available on bioaccumulation.

Partition coefficient
Not applicable. Technically not feasible.

12.4. Mobility in soil

Mobility
The product contains substances which are water soluble and may spread in water systems.

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB assessment
This product does not contain any substances classified as PBT or vPvB.

12.6. Other adverse effects

Other adverse effects
Not determined.

SECTION 13: Disposal considerations
ACID AMMONIUM MOLYBDATE

13.1. Waste treatment methods
Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.

SECTION 14: Transport information

General
The product is not covered by international regulations on the transport of dangerous goods (IMDG, IATA, ADR/RID).

14.1. UN number
UN No. (ADR/RID) 0

14.2. UN proper shipping name

14.3. Transport hazard class(es)
Transport labels

14.4. Packing group

14.5. Environmental hazards
Environmentally hazardous substance/marine pollutant No.

14.6. Special precautions for user

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture
National regulations Chemicals (Hazard Information and Packaging for Supply) Regulations as ammended.
EU legislation Dangerous Preparations Directive 1999/45/EC.

15.2. Chemical safety assessment
No chemical safety assessment has been carried out.

SECTION 16: Other information

Abbreviations and acronyms used in the safety data sheet
(EC) No. 1272/2008 : EU Regulation on Classification, Labelling and Packaging of Substances and Mixtures.
NPIS - National Poisons Information Service.
vPvB - Very Persistent, Very bioaccumulative.
PBT - Persistent, Bioaccumulative & Toxic.
REACH - Registration, Evaluation, Authorisation & restriction of CHemicals (Regulation EC 1907/2006).
DNEL - Derived No Effect Limit.
PNEC - Predicted No Effect Concentration.
COSHH - Control of Substances Hazardous to Health.
Industry - Refers in section 8 to application of the substance in an industrial process.
Professional - Refers in section 8 to application/use of the preparation/product in a skilled trade premises.

General information
This document is a Safety Data Sheet, NOT a CoSHH assessment. It is the customer's responsibility to conduct a full CoSHH assessment, taking into account the information held within this document along with other local factors considered in a risk assessment.

Revision comments
Review in line with CLP Regulation.

Revision date 04/01/2016
ACID AMMONIUM MOLYBDATE

**Risk phrases in full**
- R22 Harmful if swallowed.
- R35 Causes severe burns.

**Hazard statements in full**
- H290 May be corrosive to metals.
- H314 Causes severe skin burns and eye damage.
- H315 Causes skin irritation.
- H319 Causes serious eye irritation.

**REACH extended MSDS comments**
REACH requires that persons handling chemicals should take the necessary risk management measures, in accordance with assessments from manufacturers and importers of chemical substances. The relevant recommendations must be passed along the supply chain. These assessments are generally reported in Exposure Scenarios. Where Exposure Scenarios have been provided for substances used in this product, the relevant information is incorporated into the safety data sheet.

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.