

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations Date of issue: 08/13/2014 Version: 1.0

| SECTION 1: Identification of the | substance/mixture and of the com | nanv/undertak | ing |
|--|--|-----------------------|--|
| 1.1. Product identifier | | ipany/undertak | ing |
| Product form | : Mixture | | |
| Product name | : Ammonium Molybdate, 4% w/v | | |
| Product code | : LC11210 | | |
| | | | |
| | substance or mixture and uses advised ag | | |
| Use of the substance/mixture | : For laboratory and manufacturing us | e only. | |
| 1.3. Details of the supplier of the sa | fety data sheet | | |
| LabChem Inc Jackson's Pointe Commerce Park Building [.] Zelienople, PA 16063 - USA T 412-826-5230 - F 724-473-0647 <u>info@labchem.com</u> - <u>www.labchem.com</u> | 1000, 1010 Jackson's Pointe Court | | |
| 1.4. Emergency telephone number | | | |
| Emergency number | : CHEMTREC: 1-800-424-9300 or 01 | 1-703-527-3887 | |
| | | | |
| SECTION 2: Hazards identification | | | |
| 2.1. Classification of the substance | or mixture | | |
| GHS-US classification | | | |
| Not classified | | | |
| | | | |
| 2.2. Label elements | | | |
| | | | |
| GHS-US labelling | | | |
| No labelling applicable | | | |
| 2.3. Other hazards | | | |
| Other hazards not contributing to the | : None under normal conditions. | | |
| classification | | | |
| 2.4. Unknown acute toxicity (GHS-U | S) | | |
| No data available | | | |
| SECTION 3: Composition/inform | ation on ingredients | | |
| 3.1. Substance | | | |
| Not applicable | | | |
| | | | |
| 3.2. Mixture | | | |
| Name | Product identifier | % | GHS-US classification |
| Water | (CAS No) 7732-18-5 | 96 | Not classified |
| Ammonium Molybdate Tetrahydrate | (CAS No) 12054-85-2 | 4 | Skin Irrit. 2, H315 Eye Irrit. 2A, H319 STOT SE 3, H335 Aquatic Acute 3, H402 |
| | | | |
| SECTION 4: First aid measures | | | |
| | | | |
| 4.1. Description of first aid measure | | | If you fool upwall, sook modical advise |
| First-aid measures general | (show the label where possible). | | . If you feel unwell, seek medical advice |
| First-aid measures after inhalation | : Assure fresh air breathing. Allow the | | |
| First-aid measures after skin contact | : Remove affected clothing and wash warm water rinse. | all exposed skin are | a with mild soap and water, followed by |
| First-aid measures after eye contact | : Rinse immediately with plenty of wat | ter. Obtain medical a | ttention if pain, blinking or redness |

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| 4.2. Most important symptoms and effects, both acute and delayed Symptoms/injuries : Not expected to present a significant hazard under anticipated conditions of normal use. | | | | |
|---|---------------------------|-----------------------|---|--|
| 4.3. Indication of any immediate medical attention and special treatment needed | | | d | |
| Obtain n | nedical assistance. | | | |
| SECTI | ON 5: Firefighting | measures | | |
| 5.1. | Extinguishing media | | | |
| Suitable | extinguishing media | : | Foam. Dry powder. Carbon dioxide. W | /ater spray. Sand. |
| Unsuitat | le extinguishing media | : | Do not use a heavy water stream. | |
| 5.2. | Special hazards arisi | | tance or mixture | |
| No addit | ional information availat | ble | | |
| 5.3. | Advice for firefighter | | | |
| - | ing instructions | | chemical fire. Prevent fire-fighting wate | |
| Protectio | on during firefighting | : | Do not enter fire area without proper p | rotective equipment, including respiratory protection. |
| SECTI | ON 6: Accidental | release measu | res | |
| 6.1. | Personal precautions | s, protective equip | oment and emergency procedures | |
| 6.1.1. | For non-emergency | personnel | | |
| Protectiv | e equipment | : | Safety glasses. Gloves. | |
| Emerger | ncy procedures | : | Evacuate unnecessary personnel. | |
| 6.1.2. | For emergency respo | onders | | |
| Protectiv | e equipment | : | Equip cleanup crew with proper protect | ction. |
| Emerger | ncy procedures | : | Ventilate area. | |
| 6.2. | Environmental preca | utions | | |
| Prevent | entry to sewers and pub | olic waters. Notify a | uthorities if liquid enters sewers or publi | c waters. |
| 6.3. | Methods and materia | | | |
| Methods | for cleaning up | : | Soak up spills with inert solids, such a spillage. Store away from other materi | s clay or diatomaceous earth as soon as possible. Collect als. |
| 6.4. | Reference to other se | ections | | |
| See Hea | iding 8. Exposure contro | ols and personal pro | otection. | |
| SECTI | ON 7: Handling ar | nd storage | | |
| 7.1. | Precautions for safe | | | |
| Precauti | ons for safe handling | : | | with mild soap and water before eating, drinking or ide good ventilation in process area to prevent formation of |
| 7.2. | | storage, including | any incompatibilities | |
| - | conditions | : | Keep container closed when not in use. | |
| | tible products | : | : Strong acids. | |
| Incompatible materials : Sources of ignition. Direct sunlight. | | | | |
| 7.3. Specific end use(s) | | | | |
| No additional information available | | | | |
| SECTION 8: Exposure controls/personal protection 8.1. Control parameters | | | | |
| | | | | |
| Ammonium Molybdate Tetrahydrate (12054-85-2) USA ACGIH ACGIH TWA (mg/m³) 0.5 mg/m³ | | 0.5 mg/m3 | | |
| | | ACGIH TWA (mg | , | 0.5 mg/m ³ |
| USA O | SHA | OSHA PEL (TWA | .) (mg/m°) | 5 mg/m³ |
| 8.2. | Exposure controls | | | |

: Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure.

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| Personal protective equipment | : Avoid all unnecessary exposure. |
|-------------------------------|--|
| Hand protection | : Wear protective gloves. |
| Eye protection | : Chemical goggles or safety glasses. |
| Respiratory protection | : Wear appropriate mask. |
| Other information | : Do not eat, drink or smoke during use. |

SECTION 9: Physical and chemical properties

| 9.1. Information on basic physical and o | chemical properties | |
|--|--|--|
| Physical state | : Liquid | |
| Colour | : Colourless | |
| Odour | : None. | |
| Odour threshold | : No data available | |
| рН | : No data available | |
| Relative evaporation rate (butylacetate=1) | : No data available | |
| Melting point | : No data available | |
| Freezing point | : No data available | |
| Boiling point | : No data available | |
| Flash point | : No data available | |
| Auto-ignition temperature | : No data available | |
| Decomposition temperature | : No data available | |
| Flammability (solid, gas) | : No data available | |
| Vapour pressure | : No data available | |
| Relative vapour density at 20 °C | : No data available | |
| Relative density | : No data available | |
| Density | : 1 g/ml | |
| Solubility | Soluble in water. Water: Solubility in water of component(s) of the mixture : Ammonium Molybdate Tetrahydrate: 63.5 g/100ml @ 25°C | |
| Log Pow | : No data available | |
| Log Kow | : No data available | |
| Viscosity, kinematic | : No data available | |
| Viscosity, dynamic | : No data available | |
| Explosive properties | : No data available | |
| Oxidising properties | : No data available | |
| Explosive limits | : No data available | |
| 9.2. Other information | | |
| No additional information available | | |
| SECTION 10: Stability and reactivity | | |
| 10.1. Reactivity | | |
| No additional information available | | |

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

Not established.

10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures.

10.5. Incompatible materials

Strong acids.

10.6. Hazardous decomposition products

Gaseous ammonia.

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SECTION 11: Toxicological information

11.1. Information on toxicological effects

: Not classified

| Water (7732-18-5) | |
|---|---|
| LD50 oral rat | ≥ 90000 mg/kg |
| ATE US (oral) | 90000 mg/kg bodyweight |
| Skin corrosion/irritation | : Not classified |
| Serious eye damage/irritation | : Not classified |
| Respiratory or skin sensitisation | : Not classified |
| Germ cell mutagenicity | : Not classified |
| Carcinogenicity | : Not classified |
| Reproductive toxicity | : Not classified |
| Specific target organ toxicity (single exposure) | : Not classified |
| Specific target organ toxicity (repeated exposure) | : Not classified |
| Aspiration hazard | : Not classified |
| Potential adverse human health effects and symptoms | : Based on available data, the classification criteria are not met. |

SECTION 12: Ecological information

12.1. Toxicity

| Ammonium Molybdate Tetrahydrate (| 12054-85-2) |
|-------------------------------------|--|
| LC50 fishes 1 | 320 mg/l |
| EC50 Daphnia 1 | 140 mg/l |
| LC50 fish 2 | 420 |
| ErC50 (algae) | 41 mg/l |
| 12.2. Persistence and degradability | y |
| Ammonium Molybdate, 4% w/v | |
| Persistence and degradability | Not established. |
| Ammonium Molybdate Tetrahydrate (| (12054-85-2) |
| Persistence and degradability | Not established. |
| Water (7732-18-5) | |
| Persistence and degradability | Not established. |
| 12.3. Bioaccumulative potential | |
| Ammonium Molybdate, 4% w/v | |
| Bioaccumulative potential | Not established. |
| Ammonium Molybdate Tetrahydrate (| (12054-85-2) |
| Bioaccumulative potential | Not established. |
| Water (7732-18-5) | |
| Bioaccumulative potential | Not established. |
| 12.4. Mobility in soil | |
| No additional information available | |
| 12.5. Other adverse effects | |
| Effect on ozone layer | : No additional information available |
| Effect on the global warming | : No known ecological damage caused by this product. |
| Other information | : Avoid release to the environment. |
| | |

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| SECTION 13: Disposal considerations | | |
|--------------------------------------|---|--|
| 13.1. Waste treatment methods | | |
| Waste disposal recommendations | : Dispose in a safe manner in accordance with local/national regulations. | |
| Ecology - waste materials | : Avoid release to the environment. | |
| SECTION 14: Transport informa | tion | |
| In accordance with DOT | | |
| Not regulated for transport | | |
| Additional information | | |
| Other information | : No supplementary information available. | |
| ADR | | |
| Transport document description | : | |

Transport by sea

No additional information available

Air transport

No additional information available

SECTION 15: Regulatory information

15.1. US Federal regulations

All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

This product or mixture does not contain a toxic chemical or chemicals in excess of the applicable de minimis concentration as specified in 40 CFR §372.38(a) subject to the reporting requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

Ammonium Molybdate Tetrahydrate (12054-85-2)

Not listed on the United States SARA Section 313

15.2. International regulations

| CANADA | | |
|--|---|--|
| Ammonium Molybdate, 4% w/v | | |
| WHMIS Classification | Uncontrolled product according to WHMIS classification criteria | |
| Ammonium Molybdate Tetrahydrate (12054-85-2) | | |
| Listed on the Canadian DSL (Domestic Sustances List) | | |
| WHMIS Classification | Class D Division 2 Subdivision B - Toxic material causing other toxic effects | |
| Water (7732-18-5) | | |
| Listed on the Canadian DSL (Domestic Sustances List) | | |
| WHMIS Classification | Uncontrolled product according to WHMIS classification criteria | |

EU-Regulations

No additional information available

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Classification according to Directive 67/548/EEC or 1999/45/EC

Not classified

15.2.2. National regulations

| Ammonium Molybdate Tetrahydrate (12054-85-2) |
|---|
| Listed on the Canadian IDL (Ingredient Disclosure List) |

15.3. US State regulations

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer and/or reproductive harm

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SECTION 16: Other information

Other information

: : None.

Full text of H-phrases: see section 16:

| Aquatic Acute 3 | Hazardous to the aquatic environment — Acute Hazard, Category 3 |
|-----------------|---|
| Eye Irrit. 2A | Serious eye damage/eye irritation, Category 2A |
| Skin Irrit. 2 | Skin corrosion/irritation, Category 2 |
| STOT SE 3 | Specific target organ toxicity — Single exposure, Category 3, |
| | Respiratory tract irritation |
| H315 | Causes skin irritation |
| H319 | Causes serious eye irritation |
| H335 | May cause respiratory irritation |
| H402 | Harmful to aquatic life |

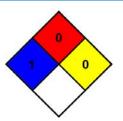
NFPA health hazard

: 1 - Exposure could cause irritation but only minor residual injury even if no treatment is given.

NFPA fire hazard

NFPA reactivity

- : 0 Materials that will not burn.
- : 0 Normally stable, even under fire exposure conditions, and are not reactive with water.



| HMIS III Rating | |
|--------------------------|--|
| Health | : 1 Slight Hazard - Irritation or minor reversible injury possible |
| Flammability | : 0 Minimal Hazard |
| Physical | : 0 Minimal Hazard |
| Personal Protection | : B |
| SDS US (GHS HazCom 2012) | |

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