# Safety Data Sheet

**MOLYBDIC 395**
SDS No: 092/000
Effective Date: 21/09/2022
Revision no: 000
Product Code: 092000

## SECTION 1
## COMPANY AND CHEMICAL PRODUCT IDENTIFICATION

**Product Name:** **MOLYBDIC 395**
**Chemical Identifier:** Sodium Molybdate
**Product Use:** Fertilizer
**Restrictions on use:** Agriculture

**Supplier:** **Nutrico SA (Pty) Ltd. (Co. Reg. No. 2003/008663/07)**
Cedar Lake Industrial Estate,
1 Harvest Place, Clayville, Olifantsfontein, 1666, Gauteng, RSA
**Telephone:** (011) 392 4072
**Website:** www.nutrico.co.za

**Emergency Contact Numbers**
Griffon Poison Information : +27 82 446 8946

## SECTION 2
## HAZARDS IDENTIFICATION

Classification as defined by Regulation (EC) 1272/2008 [CLP] EU & SANS 10234:2008

| Hazard Classes | Hazard Category | Hazard Statement Code | Hazard Statements |
|---|---|---|---|
| **Health** | | | |
| Acute toxicity (oral) | 5 | H303 | May be harmful if swallowed |
| Acute toxicity (dermal) | - | - | - |
| Inhalation | - | - | - |
| Skin irritation | - | - | - |
| Eye irritation | - | - | - |
| Reproductive | - | - | - |
| STOT (RE/SE) | - | - | - |
| **Environmental** | | | |
| Aquatic (Acute/Chronic) | - | - | - |

**Label elements:** labelling as defined by Regulation (EC) 1272/2008 [CLP] EU & SANS 10234:2008

**Hazard pictograms**

**Signal word -** Warning

**Precautionary statements**

| | |
|---|---|
| P101 | If medical advice is needed, have product container or label in hand |
| P270 | Do not eat, drink or smoke when using this product |
| P264 | Wash thoroughly with soap after handling. |
| P302/352 | IF ON SKIN: Wash with plenty of water and soap. |
| P305/351/338 | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do so. Continue rinsing. |
| P391 | Collect spillage. |
| P501 | Dispose of contents/container in accordance with local regulations. |

**Special labelling of certain mixtures –** None known

**Other hazards –** None known

**Toxicity:** Classification according to GHS: 5

## SECTION 3
## COMPOSITION/INFORMATION ON INGREDIENTS

**Substance/Mixture:** Mixture

**Declared Ingredients:**

| Chemical name | CAS No. | EC No. | Conc. %w/w | Classification Regulation (EC) 1272/2008 |
|---|---|---|---|---|
| Sodium Molybdate | 10102-40-6 | - | >60 | H303 |

## SECTION 4
## FIRST AID MEASURES

**INHALATION:** This product is not classified as an inhalation toxicant, however, if toxication occurs, remove person from contaminated area to fresh air and assist breathing as needed. Seek medical attention if irritation persists.

**SKIN:** This product is not classified as a skin irritant, however, if skin irritation occurs, remove contaminated clothing and shoes. Gently wipe off excess chemical. Wash skin gently and thoroughly with water and non-abrasive soap. Obtain medical attention if irritation persists.

**EYES:** This product is not classified as an eye irritant, however, if in eyes, flush eyes with clean water for at least 15 – 20 minutes. Lift eyelids to facilitate irrigation. If present, remove contact lenses after 5 minutes and continue rinsing. **Seek medical attention immediately.**

**INGESTION:** May be harmful if swallowed. Seek medical attention or call a poison control centre for treatment advice. Do not induce vomiting unless instructed to do so by a poison control centre or doctor. Do not give anything by mouth to an unconscious person. If the person is alert, rinse mouth thoroughly with water and give 2 to 3 glasses of water to drink.

**IMPORTANT ACUTE EFFECTS:** May be harmful if swallowed
**IMPORTANT DELAYED EFFECTS:** None

**NOTE TO PHYSICIAN:** This product contains a Sodium Molybdate. Treat symptomatically and supportively.

## SECTION 5
## FIRE FIGHTING MEASURES

| | |
|---|---|
| **Suitable Extinguishing Media:** | Use carbon dioxide, dry chemical, water fog or foam. |
| **Unsuitable Extinguishing Media:** | High volume water jet. Use a water jet only to cool heated containers. |
| **Specific hazards:** | Non-known |
| **Special Fire Fighting Procedures:** | Remove spectators from surrounding area. Isolate the fire area and evacuate all personnel downwind of the fire. Fight fire from maximum distance and use unmanned hose holder or monitor nozzles. Keep upwind. Avoid inhaling hazardous vapours and fumes from burning materials. Remove container from fire area if possible and without risk. Do not use high volume water jet, due to contamination risk. Do not scatter the burning material. Water can be used to cool unaffected containers but must be contained for later disposal. Contain fire control agents for later disposal. Avoid pollution of waterways by run-off from the site. |
| **Personal protective equipment:** | Wear NIOSH/MSHA approved self-contained breathing apparatus and full protective gear. |

## SECTION 6
## ACCIDENTAL RELEASE MEASURES

| | |
|---|---|
| **Personal Precautions:** | Avoid contact with eyes. Do not breathe in spray mist or fumes. Ventilate area of spill or leak, especially in contained areas. |
| **Protective equipment:** | Refer to Section 8 for personal protective equipment to be worn during containment and clean-up of a spill involving this product. |
| **Emergency procedures:** | Alert emergency personnel, evacuate unprotected personnel and animals. |
| **Environmental Precautions:** | Prevent spilled product from entering sewers, waterways, or ground water. Any spillages or uncontrolled discharges into watercourses should be reported immediately to the police and the Department of Water/Environmental Affairs. |
| **Methods & Materials for Containment:** | Contain spilled product by diking area with sand or earth. |
| **Methods & Materials for Clean-up:** | Cover contained spill with an inert absorbent material such as sand, vermiculite, earth or other appropriate material. Vacuum, scoop, or sweep up material and place the material into a clean, dry, sealable container. Label containers with the contents and dispose of according to local regulations. Do not place spilled material back in original container. Do not re-use spill material. Collect washings and add to the drums already collected. Do not flush spilled material or washings into drains or waterways. To decontaminate the spill area, tools and equipment, wash with water and suitable detergent. See section 13 for disposal considerations. |

## SECTION 7
## HANDLING AND STORAGE

**HANDLING**

**Precautions for safe handling:** Avoid contact with skin and eyes. Ensure adequate ventilation during handling and use. Do not handle broken packages without protective equipment. Immediately clean up spills that occur during handling. Keep containers closed when not in use. In the case of contact with the product refer to First Aid Measures – Section 4.

**General occupational hygiene:** Practice good hygiene when using this material. Wash hands before eating, drinking, chewing gum, smoking, using the toilet or applying cosmetics. Worker should shower at the end of each workday. Launder all clothing before it is re-used.

**STORAGE**

**Conditions for safe storage:** Keep out of reach of unauthorised persons, children and animals. Store in its original, labelled container, tightly closed, in an isolated, dry, cool and well- ventilated area. Avoid excess heat. Not to be stored next to foodstuffs, feed and water supplies. Avoid cross contamination with other pesticides and fertilisers.

**Incompatible substances and mixtures:** Refer to product label.

**Packaging material:** Bags

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## SECTION 8
## EXPOSURE CONTROLS AND PERSONAL PROTECTION

**Permissible concentration:** Permissible Exposure Limit (PEL) = 5.0 mg/$m^3$ as Mo

**ENGINEERING CONTROLS:**

It is essential to provide adequate ventilation. The measures appropriate for a particular worksite depend on how this material is used and on the extent of exposure. Local Exhaust: Provide general or local exhaust ventilation systems to maintain airborne concentrations below OELs or other specified exposure limits. Local exhaust ventilation is preferred. Ensure that control systems are properly designed and maintained. Comply with occupational safety, environmental, fire, and other applicable regulations.

**PERSONAL PROTECTIVE EQUIPMENT**

**Respiratory Protection:** For most well-ventilated conditions, no respiratory protection should be needed. If used in a poorly ventilated area (airborne concentrations exceed exposure limits), use a NIOSH approved air-purifying respirator.

**Hand Protection:** The use of chemically protective gloves is recommended to prevent against skin contact.

**Eye Protection:** The use of chemical safety goggles is recommended to prevent against eye contact. Contact lenses are not protective eye devices.

**Skin and Body Protection:** Wear appropriate protective clothing; boots, hat and equipment to prevent repeated or prolonged skin contact with this substance.

**Emergency eyewash:** Where there is any possibility that a handler's eyes may be exposed to this substance; an eye wash fountain should be provided or appropriate alternative within the immediate work area for emergency use.

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## SECTION 9
## PHYSICAL AND CHEMICAL PROPERTIES

| Property | Value/description | Method |
|---|---|---|
| Physical state | Solid (Powder) | Visual |
| Colour | White | Visual or Munsell |
| Odour | Odourless | Organoleptic |
| pH (1% aqueous dilution) | 6.5 – 6.9 | CIPAC MT 75.3 |
| Melting/Freezing point | Not applicable | |
| Boiling point | Not applicable | |
| Flash point | Not applicable | |
| Flammability | Not flammable | |
| Vapour pressure | Not applicable | |
| Relative Vapour Density | Not applicable | |
| Density | 1.00 $g/cm^3$ | Pycnometer |
| Solubility | Soluble in water | |
| n-Octanol/Water partition coefficient | Not available | |
| Auto-ignition temperature | Not applicable | |
| Decomposition temperature | Not available | |
| Viscosity | Not applicable | |
| Explosive properties | Not explosive | |
| Oxidising properties | Not oxidative | |

## SECTION 10
## STABILITY AND REACTIVITY

**Chemical Stability:** The product is stable for two years at ambient temperature and pressure, under normal storage and handling conditions. Avoid storage under extreme temperatures and conditions. Store below 50 °C, preferably below 30 °C, and not for prolonged periods in direct sunlight.

**Reactivity:** Not applicable.

**Possibility of Hazardous Reactions:** Not applicable.

**Conditions to Avoid:** Extreme heat or exposure to flames.

**Incompatible Materials:** Refer to product label.

**Hazardous Decomposition Products:** Not applicable

## SECTION 11
## TOXICOLOGICAL INFORMATION

**GHS Classification:** May be harmful if swallowed (H303)

| Toxicity | Effective dose/ concentration | Value | Species | Method/Source |
|---|---|---|---|---|
| Acute Oral | $LD_{50}$ | 4233 mg/kg | - | GHS ATE Calculation |
| Acute Dermal | $LD_{50}$ | N/A | - | |
| Acute Inhalation | $LC_{50}$ | N/A | - | |
| Skin irritation | Not classified as a skin irritant | | | |
| Eye irritation | Not classified as an eye irritant | | | |
| Skin sensitization | Not classified as a skin sensitizer | | | |
| Respiratory sensitization | Not known to be a respiratory sensitizer. | | | |
| Mutagenicity/Genotoxicity | Not classified as a mutagenic/genotoxic toxicant | | | |
| Carcinogenicity | Not classified as a carcinogen | | | |
| Reproductive toxicity | Not classified as a reproductive toxicant | | | |
| Specific target organ toxicity: | Not classified as a specific target organ toxicant. | | | |
| Chronic effects (e.g developmental) | Non known | | | |

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## SECTION 12
## ECOLOGICAL INFORMATION

**GHS Classification:** Shall not be classified as hazardous to the environment.

| **Toxicity** | Effect dose/ concentration | Value | Test duration | Species | Method/Source |
|---|---|---|---|---|---|
| **Aquatic** | | | | | |
| Fish | $LC_{50}$ | Not available | Not Available | Not Available | - |
| Crustacea | NOEC<br>$EC_{50}$ | | | | |
| Algae | NOEC<br>$EC_{50}$ | | | | |

**ENVIRONMENTAL EFFECTS**

**Persistence and degradability:** Degradability of inorganic substances is not determined

**Bio-accumulative Potential:** Soluble in water, therefore not expected to bio-accumulate.

**Mobility in soil:** Mobile in soil.

**Other adverse effects:** Not determined.

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## SECTION 13
## DISPOSAL CONSIDERATIONS

Hazardous waste according to Directive 2008/98/EC (waste framework directive).

**Waste:** Open dumping or burning of this product is prohibited. Waste resulting from the use of this product cannot be reused or re-processed. Never pour untreated waste or surplus product into public sewers or where there is any danger of run-off or seepage into water systems. Do not contaminate rivers, dams or any other water sources with the product or used containers. Comply with local legislation applying to waste disposal. The product may be taken to a registered waste disposal site or incineration plant.

**Container:** Emptied containers retain product residues. Do not re-use the empty container for any other purpose. Triple rinse empty containers by inverting the empty container over the spray or mixing tank and allow draining for at least 30 seconds after the flow has slowed down to a drip. Thereafter, rinse the container three times with a volume of water equal to a third of that of the container. Add the rinsing to the contents of the spray tank before destroying the container in the prescribed manner. Destroy the container by perforating and flattening and dispose of through an approved waste dump site, incineration plant or recycling company. Observe all labelled safeguards until container is destroyed.

## SECTION 14
## TRANSPORT INFORMATION

**UN Number:** Not Regulated

**Road Transport ADR/IRD:**
Class: N/A
Packaging group: N/A
UN Proper Shipping Name: N/A

**Maritime Transport IMDG/IMO:**
Class: N/A
Packaging group: N/A
UN Proper Shipping Name: N/A
Marine Pollutant (Y/N): No

**Air Transport IATA/ICAO:**
Class: N/A
Packaging group: N/A
UN Proper Shipping Name: N/A

**Special/Environmental Precautions:** Wedge drums tightly to avoid movement.

**Transport in bulk** (according to MARPOL 73/78, Annex II and the IBC code): Not available.

## SECTION 15
## REGULATORY INFORMATION

**Safety, health and environmental regulations/legislation for the mixture/substance:**
OHSA 1993 Regulations for Hazardous Chemical Substances.

**Relevant information regarding restrictions:** None.

**EU regulation:** Regulation EC1272/2008 (EU-GHS/CLP)

**Other national regulations:** None.

**Chemical Safety Assessment carried out?** No

## SECTION 16
## OTHER INFORMATION

**PACKAGING:**
Packed in 25 kg bags, labelled according to South African regulations and guidelines.

**DISCLAIMER:**
The information on this sheet is not a specification; it does not guarantee specific properties. The information is intended to provide general guidance as to health and safety based upon our knowledge of the handling, storage and use of the product. It is not applicable to unusual or non-standard uses of the product nor where instructions or recommendations are not followed. All information is given in good faith but without guarantee in respect of accuracy, and no responsibility is accepted for errors and omissions or the consequence thereof.