

Safety Data Sheet (SDS) MOB SL/01

According to UN GHS 9th Ed

Revision Date: 2023/07/14

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Version: 1.2

SECTION 1. IDENTIFICATION OF THE SUBSTANCE AND OF THE COMPANY/UNDERTAKING

Product identifier:

Identification as on the label/Trade name: **Agro-MoB**

Additional information: Product code MOB SL/01

Relevant identification uses of the substance and uses advised against:

Identified uses: Fertilizer.

Uses advised against: Use only as directed.

Details of the supplier of the Safety Data Sheet:

AECI Limited

14 Field Road, LILANTON

Emergency telephone numbers:

Griffon Poison information centre: 082 446 8946

Poisons Information Helpline: 0861 555 777

AECI Limited: (011) 823 8000 (o/h) Spill Tech: 086 100 0366 (a/h)

SECTION 2. HAZARD IDENTIFICATION

Classification of the substances or mixture

The mixture is classified according to

SANS 10234:2019, Regulation EC 1272/2008 [EU-GHS/CLP]	
Hazard classes/Hazard categories	Hazard statement
Skin irritation (Category 2)	H315
Eye irritation (Category 2)	H319
Specific Target Organ Toxicity single exposure (Category 3)	H335
Reproduction toxicity (Category 1B)	H360FD

For full text of H statements see section 16

The most important adverse effects

The most important adverse physiochemical effects: None.

The most important adverse human health effects: Causes skin, eye and respiratory irritation.

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Label elements

Hazard pictograms:



Signal Word: Danger

Hazard Statements: H315 Causes skin irritation. H319 Causes serious eye irritation. H360FD May damage fertility. May damage the unborn child. H355 May cause respiratory irritation.

Precautionary Statements: P202 Do not handle until all safety precautions have been read and understood. P261 Avoid breathing /mist/vapours/spray. P264 Wash hands thoroughly after handling. P280 Wear protective gloves/ protective clothing/ eye 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. P318 If exposed or concerned, get medical advice. P332+P317 If skin irritation occurs: Get medical help. P337+P317 If eye irritation persists: Get medical help.

Special labelling of certain mixtures: None known.

Other hazards: None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance/Mixture: Mixture

Ingredients:

Substance name (IUPAC)	CAS –No.	Concentration % By weight	Classification
	EC-No.		EC1272/2008
Monoethanolamine borate	10377-81-8	25-35%	Skin irritation (Category 2) H315. Eye irritation (Category 2) H319. STOT SE 3 H335.
	233-829-3		
Boric acid granular	10043-35-2	40-50%	Reproduction toxicity (Category 1B) H360FD.
	233-139-2		

For full text of H statements see section 16

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in section 8.

SECTION 4. FIRST AID MEASURES

Description of first aid measures:

In case of inhalation: If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention if irritation occurs.

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In case of skin contact: In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical if irritation occurs.

In case of eye contact: Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Cold water may be used. Get medical attention if irritation occurs.

In case of ingestion: Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention if you feel unwell.

Most important symptoms and effects, both acute and delayed:

Inhalation: Causes respiratory irritation.

Ingestions: Maybe harmful if swallowed.

Skin contact: Causes skin irritation.

Eye contact: Causes serious eye irritation.

Indication of any immediate medical attention and special treatment needed:

Treat symptomatically.

SECTION 5. FIRE -FIGHTING MEASURE

Extinguisher media:

Suitable extinguisher media: Carbon dioxide, foam dry chemical and water fog.

SMALL FIRE: Extinguish small fires with carbon dioxide, dry powder, or alcohol-resistant foam.

LARGE FIRE: Water spray can be used for larger fires or cooling of unaffected stock but avoid the accumulation of polluted run-off from the site.

Unsuitable extinguishing media: Do not use high volume water jet, due to contamination risk.

Special hazards arising from the mixture:

During a fire, smoke may contain the original material in addition to combustion products of varying composition which may be toxic and/or irritating. Combustion products may include and are not limited to: Nitrogen oxides, carbon monoxide, carbon dioxide.

Advice for fire-fighters:

Fire fighters should wear positive pressure self-contained breathing apparatus (SCBA) and full turnout gear. Be sure to use an approved/certified respirator or equivalent.

SECTION 6. ACCIDENTAL RELEASE

Personal precautions, protective equipment and emergency procedures:

For non-emergency personnel: Isolate area. Keep unnecessary and unprotected personnel from entering the area. Refer to Section 7, Handling, for additional precautionary measures. Use appropriate safety equipment. For additional information, refer to Section 8, Exposure Controls and Personal Protection.

For emergency responders: Use an approved/certified respirator or equivalent, isolate the spill area and limit the access to emergency responders only. Avoid any contact with spilled material, use adequate protective clothes and gloves.

Environmental precautions:

Cover drains. Prevent from entering soil, ditches, sewers, waterways and/or groundwater.

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Methods for containment and cleaning up:

For small spills Contain spilled material if possible. Collect in suitable and properly labelled containers. Absorb with materials such as: sand, earth, vermiculite or diatomaceous earth.

For large spills Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g., sand, earth, vermiculite or diatomaceous earth and place in well labelled container for disposal according to local regulations.

Reference to other sections:

See section 7 for information on safe handling.

See section 8 for information on personal protection equipment.

See section 13 for information on disposal.

Additional information:

None.

SECTION 7. HANDLING AND STORAGE

Precautions for safe handling:

Wash thoroughly after handling. Keep container closed. Use with adequate ventilation.

Protective measures: Observe directions on label and instructions for use.

Advice on general occupational hygiene: Do not eat drink or smoke when handling this product.

Conditions for safe storage, including incompatibilities:

Store product in a segregated and approved area.

Specific end uses:

Use as directed. Use original container.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters:

Occupational exposure limits (OEL): No information available.

Biological exposure indices (BEI): No information available.

Additional exposure limits under the conditions of use: No information available.

Exposure control:

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday. A Risk Assessment should be conducted before handling is to commence to determine specific exposure control.

Appropriate engineering controls: Provide exhaust ventilation or other engineering controls. Ensure that eyewash stations and safety showers are proximal to the work-station location.

Hygiene measures: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to

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remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Individual protection measures, such as personal protective equipment:

Eye/face protection: Use safety glasses. If there is a potential for exposure to particles which could cause eye discomfort, wear chemical goggles.

Hand protection: Use chemical resistant gloves. Examples of preferred glove barrier materials include Nitrile/butadiene rubber, Polyethylene, Ethyl vinyl alcohol laminate, Polyvinyl alcohol, Polyvinyl chloride.

Body protection: Wear appropriate clothing for task or operation. Keep working clothes separately.

Respiratory protection: Respiratory protection is required; use an approved air-purifying respirator.

Environmental exposure controls: Prevent product from entry into sewers and water courses.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance (form): Liquid.

Colour: Pale yellow.

Odour: Slight amine odour.

Odour threshold: No information available.

pH (at concentration): 7.05 (100%)

Melting point/range (°C): No information available.

Boiling point/range (°C): No information available.

Flash point (°C): No information available.

Evaporation rate: No information available.

Flammability (solid, gas): No information available.

Ignition temperature (°C): No information available.

Upper/lower flammability/explosive limits: No information available.

Vapour pressure (20°C): No information available.

Vapour density: No information available.

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Density (25°C): 1.341

Water solubility (g/l) at 20°C: No information available.

n-Octanol/Water partition coefficient: No information available.

Auto-ignition temperature: No information available.

Decomposition temperature: No information available.

Viscosity, dynamic (mPa s): No information available.

Physical hazards:

Explosive properties: No information available.

Other information:

Fat solubility (solvent-oil to be specified): No information available.

Bulk density: No information available.

Dissociation constant in water (p Ka): No information available.

Oxidation-reduction potential: No information available.

SECTION 10. STABILITY AND REACTIVITY

Reactivity:

The product is stable under normal conditions.

Chemical stability:

Stable under normal storage conditions for 2 years.

Possibility of hazardous reactions:

Slightly reactive to reactive with reducing agents, alkalis.

Conditions to avoid:

Exposure to elevated temperatures can cause product to decompose.

Incompatible materials:

Avoid contact with: Strong acids. Strong oxidizers. Product may potentially react with various halogenated organic solvents, resulting in temperature and/or pressure increases Corrosive when wet. Heating above 60°C in the presence of aluminium can result in corrosion and generation of flammable hydrogen gas. Avoid unintended contact with: Halogenated hydrocarbons.

Hazardous decomposition products:

No information available.

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SECTION 11. TOXICOLOGICAL INFORMATION

Toxicokinetics, metabolism and distribution:

Non-human toxicological data: No Information available.

Information on toxicological effects:

Acute toxicity:

MoBee

Acute oral LD₅₀ for rats 6405 (calculated) Category 5 not classified.

Inhalation LD₅₀ for rats 8.70 mg/ℓ (calculated) Category 5 not classified for dust and mists.

Boric acid

Acute oral LD₅₀ for rats 3450-4080 mg/kg.

Dermal LD₅₀ for rats >2000 mg/kg.

Inhalation LC₅₀ (4 h) for rats >2.03 mg/ℓ (dust and mists).

Chronic toxicity: No information available.

Skin corrosion/irritation: No information available.

Serious eye damage/irritation: No information available.

Respiratory or skin sensitization: No information available.

Germ cell mutagenicity:

Boric acid

In vivo micronucleus test for Mouse, male and female oral negative.

Carcinogenicity:

Boric acid

Genotoxicity in vitro, Ames test for Salmonella typhimurium negative.

Mutagenicity (mammal cell test) for Mouse lymphoma test negative.

Mutagenicity (mammal cell test) Chinese hamster ovary cells negative.

Reproductive toxicity:

Boric acid

May damage fertility. May damage the unborn child.

STOT-single exposure: No information available.

STOT-repeated exposure: No information available.

Aspiration hazard: No information available.

SECTION 12. ECOLOGICAL INFORMATION

Toxicity:

Boric acid

Fish: Flow through test LC₅₀ (96 h) for *Oncorhynchus mykiss* (rainbow trout): 79 mg/ℓ

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Daphnia and other aquatic species: Static test EC₅₀ (48 h) *Daphnia magna* (Water flea): 133 mg/ℓ.

Algae: Static test EC₅₀ (74.5 h) *Pseudokirchneriella subcapitata* (green algae): 52.4 mg/ℓ.

Toxicity to fish (Chronic toxicity): Semi-static test (34 d) NOEC *Danio rerio* (zebra fish): 6.4 mg/ℓ.

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity): Semi-static test (21 d) NOEC *Daphnia magna* (Water flea) 34.2 mg/ℓ.

Persistence and degradability:

No information available.

Bioaccumulative potential:

No information available.

Mobility in soil

No information available.

Results of PBT& vPvB assessment:

This substance is not considered to be persistent, bioaccumulating and toxic (PBT). This substance is not considered to be very persistent and very bioaccumulating (vPvB).

Other adverse effects:

No information available.

SECTION 13. DISPOSAL CONSIDERATIONS

Waste treatment methods:

Consider suitable waste recycling, re-use or recovery options. Dispose of in accordance with municipal, provincial and national regulations. Waste Classification and Management Regulations (GN 634 of 2013). Dispose and or manage in accordance with the requirements contained in R634 Waste Classification & Management Regulations, R635 National Norms & Standards for the Assessment of Waste for Landfill Disposal and R636 National Norms & Standards for Disposal of Waste to Landfill.

Product/ packaging disposal:

Treat as hazardous waste and dispose of in accordance with municipal, provincial and national regulations.

SECTION 14. TRANSPORT INFORMATION

	Land transport (ADR/RID)	Sea transport (IMDG)	Air transport (ICAO/IATA)
UN-Number	Not required	Not required	Not required
UN Proper shipping name:	Not required	Not required	Not required
Transport hazard class:	Not required	Not required	Not required
Hazard symbol:	Not required	Not required	Not required
Packaging group:	Not required	Not required	Not required
Marine pollutant:	No	No	No
Special precautions for user:	Not required	Not required	Not required
Transport in bulk according to MARPOL 73/78 Annex II and the IBC code	Not required	Not required	Not required

Inland waterways: Not required.

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Emergency response information: No information.

SECTION 15. REGULATORY INFORMATION

Safety, health and environmental regulations/legislation for the mixture:

Relevant information regarding authorization: Occupational Health and Safety Act 1993. Regulation for Hazardous Chemical Agents, 2021. UN Recommendations on the Transport of Dangerous Goods Model Regulations Rev. 21 (2019), Globally Harmonized System of Classification and Labelling of Chemicals (GHS) Rev 8, 2019.

Relevant information regarding restrictions: None.

EU regulations: Regulation EC 1272/2008 [EU-GHS/CLP].

Other National regulations: National Road Traffic Act, 1996 (ACT NO. 93 of 1996).

SANS 10228:2012- The identification and classification of dangerous goods for transport by road and rail modes.

National Environmental Management: Waste Act 59 of 2008.

Chemical Safety Assessment carried out? No

SECTION 16. OTHER INFORMATION

Indication of changes:

Updated formulation, section 3.

Relevant H statements (number and full text):

STOT SE 3- Specific Target Organ Toxicity single exposure (Category 3).

H315 Causes skin irritation. H319 Causes serious eye irritation. H355 May cause respiratory irritation. H360FD May damage fertility. May damage the unborn child.

Training instructions:

No special training required. Read label of product.

Further information:

This information is based upon the present state of our knowledge. This SDS has been compiled and is solely intended for this product.

Notice to readers:

Employers should use this information only as a supplement to other information gathered by them and should make independent judgement of suitability of this information to ensure proper use and protect the health and safety of employees.

This information is furnished without warranty, and any use of the product not in conformance with this Safety Data Sheet, or in combination with any other product or process, is the responsibility of the user.