SAFETY DATA SHEET (SDS)	
TITLE:	**BORON ETHANOLAMINE 12% LIQUID**

1.0 IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY / UNDERTAKING

1.1 Product Identifier

Identification on the label / Trade name : AG BORON ETHANOLAMINE 12% LIQUID

Common Name : BORON ETHANOLAMINE 12% LIQUID

1.2 Relevant identified uses of the substance and uses advised against:

Fertilizer

1.3 Details of the Manufacturer / Supplier of the safety data sheet:

Supplier	AGROMEC SARL P.O.Box: 462 Jounieh, Lebanon
Tel	+961 9 226874
E-mail	agromec@agromec-international.com
Webpage	www.agromec-international.com

1.4 Emergency Phone Number (24 hours)

+961 3 980599

2.0 HAZARDS IDENTIFICATION

2.1 Classification of the mixture:

2.1.1 **Classification:**

This product does not have to be classified according to the EU REGULATION (EC) No 1272/2008 (CLP).

2.1.2 **Label elements**

N/A

3.0 COMPOSITION/INFORMATION ON INGREDIENTS

Substance Name	% w/v	Hazard Pictograms (1272/2008/EC)	Hazard Statements (1272/2008/EC)
Boron	12	-	-

4.0 FIRST AID MEASURES

4.1 Description of first aid measures

4.1.1 General information

Remove the affected person from the danger zone to a well-ventilated room or to fresh air, and protect from undercooling. IN CASE OF SUSPECTED POISONING: Immediately call a physician.

4.1.2 In case of inhalation

Possible symptoms are coughing and/or dyspnea. If not breathing, give artificial respiration. If symptoms persist, call a physician.

4.1.3 In case of skin contact

Remove contaminated clothing and thoroughly wash the affected parts of the body with soap and water.

4.1.4 In case of eyes contact

Rinse eyes with clean water for several minutes and immediately call a physician.

4.1.5 In case of ingestion

Possible symptoms are nausea and/or vomiting. Clean mouth with water and drink afterwards plenty of water. If a person vomits when lying on his back, place him in the recovery position. Never give anything by mouth to an unconscious person. Consult a physician if necessary.

4.2 Notes for the doctor

No specific antidote is known. Apply symptomatic therapy. Artificial respiration and/or oxygen may be necessary

5.0 FIRE – FIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media	:	Use dry chemical, CO2, water spray or "alcohol" foam.
Unsuitable extinguishing media	:	High volume water jet.

5.2 Special hazards arising from the substance or mixture

Hazardous combustion products	:	carbon dioxide; carbon monoxide

5.3 Advice for fire-fighters

Combustion products are toxic and/or irritant. Use self-contained breathing apparatus. Wear protective equipment.

5.4 Additional information

This product is combustible at elevated temperatures.

6.0 ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

6.1.1 For non-emergency personnel

Protective equipment	:	Wear protective clothing and personal protective equipment as prescribed in Section 8.
Emergency procedures	:	N/A

6.1.2 **For emergency responders**

Personal protective equipments	:	See section 8.

6.1.3 **Environmental precautions**

Prevent product from entering drains. Do not contaminate surface water.

6.2 Methods and material for cleaning up

6.2.1 **For cleaning up**

Sweep up and shovel..

6.2.2 **Other information**

N/A

6.2.3 **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.

7.0 HANDLING AND STORAGE

7.1 Precautions for safe handling

7.1.1 **Protective measures**

Fire preventions	:	Use non-sparking type tools and equipment, including explosion proof ventilation.
Environmental precautions	:	Do not contaminate waters and sewers

7.1.2 **Advice on general occupational by hygiene**

Avoid contact with skin, eyes and clothing. Avoid inhalation of fog and vapors. Do not eat, drink or smoke while working. In addition to the measures usually taken in chemical works like splash proof filling and measuring equipment (including vapor stripping), further personal protection measures may have to be implemented to avoid possible contact with the product.

7.1.3 **Conditions for safe storage, including any incompatibilities**

Technical measures and storage conditions	:	Protect from light and humidity.
Packaging materials	:	Store the product in closed original containers.
Requirements for storage rooms and vessels	:	N/A
Hints on storage assembly	:	N/A
Further information on storage conditions	:	Keep containers dry and tightly closed to avoid moisture absorption and contamination. Keep away from food, drink and animal feeding stuffs. For quality reasons: Keep out of reach of direct sunlight, store under dry conditions, partly used bags should be closed well. Keep at temperatures between 0 °C and 40 °C.

7.1.4 **Specific and use(s**

Recommendations	:	Keep out of reach of children and animals.
Industrial sector specific solutions	:	N/A

8.0 EXPOSURE CONTROL/PERSONAL PROTECTION

8.1 Control parameters

8.1.1 **Occupational exposure limits:**

N/A

8.1.2 **Appropriate engineering controls**

Ensure adequate ventilation

8.1.3 **Personal protection equipment**

In general change working clothes daily. Wash thoroughly. Thoroughly clean protective gear. Thoroughly clean contaminated equipment with soap and soda solution.

8.1.4 **Eye / Face protection**

Use goggles or face-shield

8.1.5 **Skin Protection**

For hand protection use chemical-resistant gloves

For body protection use heavy duty cotton or synthetic fabric working clothes (e.g. overalls). Heavy-duty shoes or boots.

8.1.6 **Respiratory protection**

In case of heavy exposure, wear: Gas mask with universal filter or respirator.

9.0 PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance	:	Liquid
Odour	:	Not significant
Odour threshold	:	N/A
pH	:	N/A

Other information

Dissociation constant in water (pKa)	:	N/A
Oxidation-reduction Potential	*:*	*N/A*

10.0 STABILITY AND RELIABILITY

10.1 Reactivity

Not available

10.2 Chemical stability

Product is stable under normal storage conditions.

10.3 Possibility of hazardous reactions

Not available

10.4 Conditions to avoid

Keep away from open flames, hot surfaces and sources of ignition. Burning produces obnoxious and toxic fumes.

10.5 Incompatible materials

Strong oxidizing agents. Acids and bases. Strong reducing agents. Flammable materials.

10.6 Hazardous decomposition products

N/A

11.0 TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity

- LD50 (Dermal) : > 2000 mg/kg (rat)
- LD50 (Oral, Rat) : > 1000 mg/kg (rat)
- Inhalation LC50 > 2 mg/l

Skin corrosion/Irritation	:	May cause skin irritation in susceptible persons
Eye damage/irritation	:	May cause eye irritation with susceptible persons
Inhalation	:	May cause sensitization by inhalation
Ingestion	:	Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea

12.0 ECOLOGICAL INFORMATION

12.1 Toxicity

12.1.1 Aquatic Toxicity - Avian Toxicity

No ecological information is known on the product

12.1.2 Bee Toxicity

Non toxic to bees.

12.2 Persistence and degradability

No persistent or cumulative effects were observed

12.3 Mobility in soil

No information available.

13.0 DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

See section 6.0

13.2 Product / Packaging disposal

13.2.1 **Product waste disposal**

Pay attention to protective clothing and measures. Collect material in specially marked, tightly closing containers.

13.2.2 **Packing waste disposal**

Dispose of empty containers in an incinerator approved for chemicals.

Damaged containers: Place the original containers in specially marked larger ones. Check possibilities of recycling large empty containers, drums and barrels.

14.0 TRANSPORT INFORMATION

14.1 Land transport (ADR/RID/GGVSE): free

14.2 Sea transport (IMDG-Code/GGVSee): free

14.3 Air transport (ICAO-IATA/DGR): free

15.0 REGULATORY INFORMATION

15.1 Hazard and Precautionary statements in accordance with the regulation 1272/2008/EC

Pictograms and Signal Word Code(s)	See section 2.0
Hazard Statement Code (s)	See section 2.0

16.0 OTHER INFORMATION

16.1 Pictograms / Signal word code (s) mentioned in section 3 in accordance with the regulation 1272/2008/EC,

See section 2.0

16.2 Hazard statements mentioned in section 3 in accordance with the regulation 1272/2008/EC:

See section 2.0

16.3 Further Information

The information contained herein relates only to the specified material identified. AGROMEC believes that such information is accurate and reliable as of the data of this material safety data sheet, but no representation, guarantee or warranty, expressed or implied, is made as to the accuracy, reliability, or completeness of the information. AGROMEC urges persons receiving this information to make their own determination as to the information's suitability and completeness for their particular application.

This material safety data sheet adopts the provisions of the European Commission Directive 2001/58/EC and Regulations 1272/2008 (CLP) and 453/2010 (REACH).