

Section 1: Identification

- 1.1 Product identifier:** Intro BZM
Product Description: Liquid
Product Type: Fertilizer
- 1.2 Relevant identified uses of the substance or mixture and uses advised against**
Relevant uses: Fertilizer.
Uses advised against: All uses not specified in this section or in section 7.3
- 1.3 Details of the supplier of the safety data sheet**
Introlab (Pty) Ltd, 12 Oudepont Street, Wellington Industrial Park, Wellington, 7655
Tel: +27 21 864 2145/6
- 1.4 Emergency telephone number**
+27 82 446 8946 Griffon Poison Information Centre (24 Hour Poisoning Emergency Helpline)

Section 2: Hazardous Identification

- 2.1 Classification of the substance or mixture by CLP Regulation (EC) no 1272/2008:**
The mixture is classified as not hazardous.
- 2.2 Label elements**
Hazard pictogram(s): None
Signal word: None
Hazardous statement(s): Non-Hazardous
- Precautionary Statement(s):
P101 – If medical advice is needed, have product container or label at hand.
P102 – Keep out of reach of children.
P103 – Read label before use.
P264 - Wash thoroughly after handling.
P270 - Do not eat, drink when using this product.
P501 – Dispose of the contents/containers in accordance with the current legislation on waste treatment.

Note: These precautionary statements are not prescribed by directive 1272/2008 as this product is not classified as hazardous under this directive.

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Section 3: Composition / Information on Ingredients

3.1 Substance:

Boron	(B)	80 g/L	59 g/kg
*Zinc	(Zn)	40 g/L	29 g/kg
*Manganese	(Mn)	20 g/L	15 g/kg
Nitrogen	(N)	37 g/L	27 g/kg
Sulphur	(S)	31 g/L	23 g/kg
Amino Acids		60 g/L	44 g/kg

*Amino Acids and Carbohydrate Chelate

3.2 **Mixture:** Components contained in the mixture is not classified as hazardous.

Section 4: First Aid Measures

4.1 Description of first aid measures

The symptoms resulting from intoxication can appear after exposure, therefore, in case of doubt, seek medical attention for direct exposure to the chemical product or persistent discomfort, showing the SDS of this product.

By inhalation:

Remove to fresh air. If not breathing give artificial respiration. If breathing is difficult, give oxygen. Do NOT give mouth-to-mouth resuscitation if victim ingested or inhaled the substance. Keep person at rest and warm. Treat symptomatically and supportively as and when required. Obtain medical advice if necessary.

By skin contact:

Remove any contaminated clothing. Wash skin with soap or mild detergent and water for at least 15 minutes. Get medical attention if irritation develops or persists. Wash clothing before re-use.

By eye contact:

Immediately flush eyes with lukewarm water or saline solution for at least 15 minutes, lifting lower and upper eyelids occasionally. Check for and remove any contact lenses after 5 minutes. Get medical attention if necessary.

By ingestion / aspiration:

Have victim rinse mouth thoroughly with water. Give water to dilute the material if victim is alert and not convulsing. Induce vomiting immediately as directed by medical personnel. If spontaneous vomiting occurs, have victim lean forward with head down to avoid breathing in of vomits, rinse mouth and administer more water. Never give anything by mouth to an unconscious person. Qualified medical personnel should perform administration of oxygen. Seek medical advice if necessary.

4.2 **Most important symptoms and effects, both acute and delayed:** No information available.

4.3 Indication of any immediate medical attention and special treatment needed

Notes to physician: None.

Specific treatments: Treat symptomatically.

Section 5: Fire Fighting Measures

5.1 Fire Extinguishing Media

Suitable extinguisher media:

SMALL FIRE: Use dry chemical powder.

LARGE FIRE: Use water spray, fog or foam. Do not use water jet.

Unsuitable extinguishing media: None known.

5.2 Special hazards arising from the substance or mixture: No information available.

5.3 Additional provisions:

Act in accordance with the Internal Emergency Plan and the Information Sheets on actions to take after an accident or other emergencies. In the event of a fire, wear full protective clothing and self-contained breathing apparatus with full-face piece operated in the pressure demand or other positive pressure mode.

Section 6: Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures: Wear appropriate personal protective equipment.

6.2 Environmental precautions: Keep product away from drains, surface and underground water.

6.3 Methods and materials for containment and cleaning up

Spills: Collect in containers for disposal. Wash contaminated surfaces to remove any residues. Minimize use of water to prevent environmental contamination.

Large Spills: Prevent spillage or further leakage if it is safe to do so. Contain spillage with sand bags or by other means. Absorb with earth, sand or absorbent material. Dig up heavily contaminated soil. Flush with water to remove any residues. Keep product and wash water out of drains, sewers, ditches and waterways.

6.4 Reference to other sections:

See Section 1 for emergency contact information.

See Section 8 for information on appropriate personal protective equipment.

See Section 13 for additional waste treatment information.

Section 7: Handling & Storage

7.1 Precautions for safe handling: Keep containers hermetically sealed. Avoid leakages from the container. Observe directions on label and instructions for use. Do not eat or drink during the process, washing hands afterwards with suitable cleaning products.

7.2 Conditions for safe storage, including any incompatibilities: Store in the closed, original container in a dry, cool, well-ventilated area out of direct sunlight. Avoid sources of heat, radiation, static electricity and contact with food.

Technical measures for storage: Minimum Temp.: 5 °C Maximum Temp.: 30 °C Maximum time: 36 Months

7.3 **Specific end use(s):** Use as directed. Use original container.

Section 8: Exposure Controls / Personal Protection

8.1 **Control parameters** No specific occupational exposure limit has been established.

8.2 Exposure controls

Appropriate engineering controls: Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

Individual protection measures

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.

Eye/face protection: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts.
Possible: safety glasses with side- shields

Hand protection: Protective gloves against minor risks.

Body protection: Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory protection: Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. Use a properly fitted, particulate filter respirator complying with an approved standard if a risk assessment indicates this is necessary.

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

Section 9: Physical and Chemical Properties

9.1 Information on basic physical and chemical properties. For complete information, please refer to product datasheet.

Appearance

Physical state:	Liquid
Colour:	Amber
Odour:	Pungent odour

Volatility:

Boiling Point at atmospheric pressure:	N/A
Vapour pressure at 20 °C:	No significant volatility, aqueous liquid
Vapour pressure at 50 °C:	No significant volatility, aqueous liquid
Evaporation rate 20 °C:	No data available

Product description:

Density at 20 °C:	1.36 ± 0.02 g/mL
Relative density at 20 °C:	N/A
Dynamic viscosity at 20 °C:	N/A
Kinematic viscosity at 20 °C:	N/A
Kinematic viscosity at 40 °C:	N/A

pH:	7.5 ± 0.5
Vapour density at 20 °C:	N/A
Partition coefficient n-octanol/water at 20 °C:	N/A
Solubility in water at 20 °C:	N/A
Solubility properties:	N/A
Decomposition temperature:	N/A
Melting point/freezing point:	N/A
Explosive properties:	No explosive properties
Oxidising properties:	N/A

Flammability:

Flash point:	N/A
Auto-ignition temperature:	N/A
Lower flammability limit:	N/A
Upper flammability limit:	N/A

9.2 Other Information: No additional information.

Section 10: Stability and Reactivity

- 10.1 Reactivity:** The product is stable under recommended storage conditions.
- 10.2 Chemical stability:** The product is stable under normal storage conditions for 2 years.
- 10.3 Possibility of hazardous reactions:** No information available.
- 10.4 Conditions to avoid:** No information available.
- 10.5 Incompatible materials:** No information available.
- 10.6 Hazardous decomposition products:** No information available.

Section 11: Toxicological Information

11.1 Information on toxicological effects: No information available.

Dangerous health implications: No information available.

Section 12: Ecological Information

- 12.1 Toxicity:** No information available.
- 12.2 Persistence and degradability:** No information available.
- 12.3 Bio accumulative potential:** No bioaccumulation potential
- 12.4 Mobility in soil:** No information found.

12.5 Results of PBT and vPvB assessment: No information found.

12.6 Other adverse effects: No information available.

Section 13: Disposal Considerations

13.1 Waste treatment methods

Methods of disposal - Product: Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements.

Packaging

Methods of disposal – Packaging: Waste packaging should be recycled.

Special precautions:

This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 14: Transportation Information

	Land transport (ADR/RID)	Inland waterway transport (AND/ADNR)	Sea Transport (IMDG)	Air Transport (ICAO-TI / IATA- DGR)
14.1 UN Number	Not regulated.	Not regulated.	Not regulated.	Not regulated.
14.2 UN proper shipping name	-	-	-	-
14.3 Transport hazard class(es)	-	-	-	-
14.4 Packing Group	-	-	-	-
14.5 Environmental hazards	-	-	-	-
14.6 Special precautions for user	No data available	No data available	No data available	No data available
14.7 Transport in bulk according to Marpol and IBC Code:	No data available	No data available	No data available	No data available

Section 15: Regulatory Information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture:

Occupational Health and Safety Act 1993 Regulation for Hazardous Chemical Substances

Other legislation:

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.

15.2 Chemical Safety Assessment: The supplier has not carried out evaluation of chemical safety.

Section 16: Other Information

Legislation related to safety data sheets: This safety data sheet is GHS aligned

Advice related to training: Minimal training is recommended to prevent industrial risks for staff using this product, in order to facilitate their comprehension and interpretation of this safety data sheet, as well as the label on the product.

Principal bibliographical sources: <http://echa.europa.eu>

Relevant P-, H- and EUH-phrases (number and full text)

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Notice to reader

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