

1.1 IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND THE COMPANY

Product Identifier: INBIO TRACE

Product Description: Suspension concentrate

Product Type: Fertiliser

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

Distributed by:

Dudutech Integrated Pest Management Ltd, A Bioline Agrosciences Group Company. P. O. Box 1927 – 20117, Naivasha, Kenya

Tel: (050) 2020859, Fax: (050) 2021167

Manufactured by: Darasolve (Pty) Ltd, 12 Oudepont Street, Wellington Industrial Park, Wellington, 7655 Tel: +27 21 864 2145/6

1.4 EMERGENCY TELEPHONE NUMBER

24 Hour Poisoning Emergency Helpline: +27 82 446 8946 Griffon Poison Information Centre

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 STATEMENTS

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.







3. COMPOSITION / INFORMATION ON INGREDIENTS

3.1 SUBSTANCE

Element	Analysis Weight/Volume Percent (w/v))%
Manganese (Mn)	24
Zinc (Zn)	20
Magnesium (Mg)	4
Copper (Cu)	3.5
Iron (Fe)	0.3
Boron (B)	0.15
Molybdenum (Mo)	0.01
Cobalt (Co)	0.01

3.2 MIXTURE

Components contained in the mixture is not classified as hazardous.

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.

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.

5.3 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.

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.

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.

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.







9. PHYSICAL AND CHEMICAL PROPERTIES

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

APPEARANCE

Physical State	Suspension concentrate
Colour	Brown Pink
Odour	Slight chemical 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 at 20°C	No data available.

PRODUCT DESCRIPTION

Density at 20°C	1.67 ± 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:	10 - 11
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

9.1 OTHER INFORMATION

No additional information.

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.

11. TOXICOLOGICAL INFORMATION

11.1 INFORMATION ON TOXICOLOGICAL EFFECTS

No information available.

11.2 DANGEROUS HEALTH IMPLICATIONS

No information available.

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.

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.
- > Packaging: 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 spilt material and runoff and contact with soil, waterways, drains and sewers.







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

15. REGULATORY INFORMATION

15.1 SAFETY, HEALTH AND ENVIRONMENTAL REGULATIONS/LEGISLATION SPECIFIC FOR THE SUB-**STANCE 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.

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)

- > 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.
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