

MSDS — Material Safety Data Sheet

Last revised: March 2012
Code: ACA04

VITABOR GOLD

1. IDENTIFICATION OF THE SUBSTANCE

Product identification: Liquid, clear colourless
Use: Agriculture
UN No.: Not regulated

Supplier:

2. COMPOSITION/INFORMATION ON INGREDIENTS

Composition:

Boron (B)	13% (w/v)
Nitrogen (N)	5% (w/v)

3. HAZARDS IDENTIFICATION

Emergency Overview

- Harmful if inhaled.
- Causes irritation to skin and respiratory tract.
- Mild eye irritation.

Potential Health Effects

Inhalation:

Causes irritation to the mucous membranes of the respiratory tract. May be absorbed from the mucous membranes and depending on the amount of exposure could result in the development of nausea, vomiting, diarrhoea and gastric distress.

Ingestion:

May cause mild mucus burns of the mouth.

Skin Contact:

Causes skin irritation. Not significantly absorbed through the intact skin. Readily absorbed through damaged or burned skin.

Eye Contact:

Causes mild irritation.

Chronic Exposure:

Prolonged absorption causes weight loss, vomiting, diarrhoea, skin rash, convulsions and anaemia. May cause respiratory tract irritation and coughing.

Aggravation of Pre-existing Conditions:

Persons with pre-existing skin disorders or eye problems, or impaired liver, kidney or respiratory function may be more susceptible to the substance.

4. FIRST AID MEASURES

Inhalation:

Remove to fresh air. If not breathing gives 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.

Ingestion:

Have victim rinse mouth thoroughly with water. Give $\frac{1}{2}$ to one glass of water to dilute the material if victim is alert and not convulsing. 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 immediately.

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.

Eye Contact:

Immediately flush eyes with lukewarm water or saline solution for at least 15 minutes, lifting lower and upper eyelids occasionally. Get medical attention immediately.

5. FIRE FIGHTING MEASURES

Fire:

Combustible. Some could burn, but none ignite readily. Containers could explode when heated.

Fire Extinguishing Media:

Extinguish small fires with carbon dioxide, dry powder or alcohol-resistant foam. Water spray or fog can be used for larger fires or cooling of unaffected stock. Water may be used to flash spills away from exposures and to dilute spills to non-flammable mixtures.

Explosion:

Above flash point, vapour air mixtures are explosive within flammable limits noted above.

Special Information:

In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full-face piece operated in the pressure demand or other positive pressure mode. Fire may produce irritating or poisonous vapours, mists or other products of combustion.

6. ACCIDENTAL RELEASE MEASURES

Ventilate area of leak or spill. Wear appropriate personal protective equipment as specified in Section 8.

Small Spills: Absorb with sand or other non-combustible absorbent material and put in a suitable container for reclamation or disposal.

Large Spills: Dyke far ahead of liquid spills for later disposal. Prevent entry of the substance into waterways, sewers, basements or confined areas.

7. HANDLING AND STORAGE

Keep in tightly closed container in a shaded, well-ventilated area, away from heat, sparks and other sources of ignition. Protect against physical damage. Observe all warnings and precautions listed for the product.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Ventilation system:

In general, dilution ventilation is a satisfactory health hazard control for this substance. However, if conditions of use create discomfort to the worker, a local exhaust system should be considered.

Skin Protection:

Wear suitable personal protective equipment including rubber gloves and boots.

Eye Protection:

Use chemical safety goggles and/or full face shield where splashing is possible. Maintain eye wash fountain and quick-drench facilities in work area.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Clear, colourless liquid
Odour: Pungent odour
Solubility: Soluble in water
Density: 1.28 - 1.32

10. STABILITY AND REACTIVITY

Stability: Stable under ordinary conditions of use and storage. Hygroscopic and is a strong base.
Hazardous Polymerisation: Will not occur
Conditions to avoid: Heat, flame and other sources of ignition.
Incompatibilities: Acetic Anhydride, sulphuric acid, hydrochloric acid, acetic acid, carbon dioxide in the air, copper, copper alloys, galvanized iron, aluminium, acrolein, acrylic acid, acrylonitrile, chlorosulfonic acid, epichlorohydrin, hydrofluoric acid, mesityl oxide, nitric acid, oleum, beta-propiolactone and vinyl acetate.
Thermal Decomposition: Burning may produce carbon monoxide, carbon dioxide and nitrogen oxides.

11. TOXICOLOGICAL INFORMATION

No information found.

12. ECOLOGICAL INFORMATION

Environmental Fate: No information found.
Environmental Toxicity: No information found.

This section is subject to further development.

13. DISPOSAL CONSIDERATIONS

Contaminated absorbents, surplus product (in diluted form), etc., should be buried in approved landfill. Comply with any local legislation applying to waste disposal. Whatever cannot be saved for recovery or recycling should be handled as hazardous waste and sent to an approved waste facility. Processing, use or contamination of this product may change the waste management options. Dispose of container and unused contents in accordance with local requirements.

14. TRANSPORT INFORMATION

UN No.: Not regulated

15. REGULATORY INFORMATION

EC Classification: Harmful
Risk-phrase: R20, 36/37/38
Safety phrases: (S2)

National legislation: National Road Traffic Act, 1996 (Act 93 of 1996).
Fire Brigade Service Act, 1987 (Act 99 of 1987).
Occupational Health and Safety Act, 1993 (Act 85 of 1993).

16. OTHER INFORMATION

All information and instructions provided in this Material Safety Data Sheet (MSDS) are based on the current state of scientific and technical knowledge at the date indicated on the present MSDS and are presented in good faith and believed to be correct. This information applies to the product as such. In case of new formulations or mixes, it is necessary to ascertain that a new danger will not appear.

It is the responsibility of persons in receipt of this MSDS to ensure that the information contained herein is properly read and understood by all people who may use, handle, dispose or in any way come in contact with this product. If the recipient subsequently produces formulation(s) containing this product, it is the recipient's sole responsibility to ensure the transfer of all relevant information from this MSDS to their own MSDS.

The information contained herein is provided in good faith but makes no representation as to its comprehensiveness or accuracy. A properly trained person using this product intends this document only as a guide to the appropriate handling of the material. Individuals receiving the information must exercise their independent judgement in determining its appropriateness for a particular purpose.
