

GENESIS Mor-Bor 17

SAFETY DATA SHEET

GENESIS AGRI-PRODUCTS
2522 OLD TOWN ROAD
UNION GAP, WASHINGTON 98903
Emergency Phone # (509) 452-0302


1. IDENTIFICATION

PRODUCT IDENTIFIER: Mor-Bor 17 **CHEMICAL NAME:** Boric Acid
SYNONYMS: Orthoboric acid, boracic acid **GENERIC DESCRIPTION:** Micronutrient Fertilizer
RECOMMENDED USE: Ag Product – Nutrients **RESTRICTIONS ON USE:** None known
CHEMICAL FORMULA: Boric acid, Nonylphenol, Water

MANUFACTURER INFORMATION

COMPANY NAME: GENESIS AGRI-PRODUCTS
ADDRESS: 2522 OLD TOWN ROAD
UNION GAP, WA 98903
TELEPHONE: (509) 575-8382
EMERGENCY PHONE:
US: 1-800-424-9300 (CHEMTREC)
INTERNATIONAL: 1-202-483-7616

2. HAZARDS IDENTIFICATION

OSHA REGULATED COMPONENTS: None Known **HEALTH HAZARDS:** Suspected of damaging fertility or the unborn child.
LABEL ELEMENTS:  **SIGNAL WORD:** WARNING

HAZARD STATEMENT: Suspected of damaging fertility or the unborn child.

GHS Classification

Carcinogenicity: Not available.

H302: Reproductive Toxicity 2, Suspected of damaging fertility or the unborn child.

PRECAUTIONARY STATEMENTS

- PREVENTION** - Use only outdoors or in a well-ventilated area. Avoid breathing mist or vapor. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Wear gloves and eye/face protection when handling.
- RESPONSE** - If swallowed: Call a poison center/doctor if you feel unwell. If inhaled: Remove person to fresh air and keep comfortable for breathing. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a poison center/doctor if you feel unwell. Rinse mouth. If eye irritation persists: Get medical attention.
- STORAGE** - Store locked up.
- DISPOSAL** - Dispose of contents/container to an approved waste disposal plant

POTENTIAL HEALTH EFFECTS

Carcinogenicity: No known carcinogens present.

3. COMPOSITION/INGREDIENTS

<u>CHEMICAL NAME</u>	<u>CAS#</u>	<u>Percentage by Weight</u>
Boric acid	10043-35-3	>98
Nonylphenol	9016-45-9	<0.5
Water	7732-18-5	<1.5

4. FIRST-AID MEASURE

SYMPTOMS AND EFFECTS OF EXPOSURE & INSTRUCTIONS FOR SPECIAL MEDICAL TREATMENT

SKIN CONTACT: Immediately flush with large quantities of water. Remove contaminated clothing under a safety shower. Continue rinsing. Obtain medical attention if irritation occurs.

EYE CONTACT: Immediately flush with large quantities of water for 15 minutes. Hold eyelids apart during irritation to ensure thorough flushing of the entire area of the eye and lids. Obtain medical attention if irritation occurs.

INHALATION: Remove victim from contaminated atmosphere. If breathing is labored, administer Oxygen. If breathing has ceased, clear airway and start CPR. Obtain medical attention.

INGESTION (SWALLOWING): If victim is conscious, give 2 to 4 glasses of water. Never administer fluids to, or initiate vomiting on an unconscious person. Obtain medical attention.

5. FIRE-FIGHTING MEASURES

EXTINGUISHING MEDIA

SUITABLE EXTINGUISHING AGENTS:

CO₂ extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

UNSUITABLE EXTINGUISHING MEDIA:

None known.

SPECIAL HAZARDS ARISING FROM SUBSTANCE OR MIXTURE

PHYSICAL HAZARDS:

Closed containers exposed to extreme heat can rupture due to expanding gases and building pressure.

CHEMICAL HAZARDS:

This product is not flammable, combustible or explosive.

ADVICE FOR FIREFIGHTERS

PROTECTIVE EQUIPMENT AND PRECAUTIONS FOR FIREFIGHTERS:

Firefighters should wear self-contained breathing apparatus (SCBA) and full fire-fighting turnout gear. Keep containers/storage vessels in fire area cooled with water spray.

6. ACCIDENTAL RELEASE MEASURES

SPILLS OR RELEASES

PERSONAL PRECAUTIONS: Use personal protective equipment specified in Section 8. Isolate the hazard area and deny entry to unnecessary, untrained and unprotected personnel.

ENVIRONMENTAL PRECAUTIONS: Keep out of "waters of the United States" because of potential aquatic toxicity (See Section 12)

METHODS OF CONTAINMENT:

SMALL RELEASE: Confine and absorb small releases with sand, earth or other inert absorbent.

LARGE RELEASE: Stop release if safe to do so. Dike spill area with earth, sand or other inert absorbent to prevent runoff into surface waterways (potential aquatic toxicity), storm drains or sewers.

METHODS OF CLEANUP:

SMALL RELEASE: Shovel up the absorbed material and place in drums for disposal as a chemical waste or recycle as a fertilizer as the original product was intended.

LARGE RELEASE: Recover as much of the spilled product as possible using portable pump and hoses. Use recovered material as originally intended or dispose of as a chemical waste. Treat remaining material as a small release (above).

7. HANDLING AND STORAGE

HANDLING: Avoid contact with eyes. Use only in a well-ventilated area. Wash thoroughly after handling. Avoid prolonged or repeated contact with the skin.

STORAGE: Store in well-ventilated areas. Do not store combustibles in the area of storage vessels. Keep away from any sources of heat or flame. Store totes and smaller containers out of direct sunlight at moderate temperatures.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

CONTROL PARAMETERS

COMPONENTS WITH OCUPATIONAL EXPOSURE LIMITS:

Boric acid (10043-35-3)

ACGIH- 8hr TWA (inhalable fraction): 2mg/m³

ACGIH- 15min STEL (inhalable fraction): 6mg/m³

OSHA PEL (total dust): 15mg/m³

OSHA PEL (respirable dust): 5mg/m³

EXPOSURE CONTROLS

Use adequate exhaust ventilation to prevent inhalation of product vapors. Keep eye wash/safety shower in areas where product is commonly handled.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

EYE/FACE PROTECTION:	Chemical goggles and a full face shield.
SKIN PROTECTION:	Neoprene rubber gloves and apron should be worn to prevent repeated or prolonged contact with the liquid. Wash contaminated clothing prior to reuse.
RESPIRATORY PROTECTION:	None generally required. If conditions exist where mist may be generated, a NIOSH/MSHA approved mist respirator should be worn.
HYGIENE CONSIDERATION:	Keep away from foodstuffs, beverages, and feed, immediately remove all soiled and contaminated clothing. Wash hands before breaks and at the end of work, avoid contact with the eyes and skin.

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE

PHYSICAL STATE:	Solid
COLOR:	Clear
ODOR:	Odorless
ODOR THRESHOLD:	Not available.
pH:	5.1
MELTING POINT/FREEZING POINT:	Not available.
INITIAL BOILING POINT/BOILING RANGE:	Not available.
FLASH POINT:	Not available.
EVAPORATION RATE:	(Ether=1): Not available.
FLAMMABILITY (SOLID,GAS):	Not available.
UPPER/LOWER FLAMMABILITY OR EXPLOSIVE LIMITS:	
FLAMMIBILITY LIMIT-LOWER (%)	Not available.
FLAMMIBILITY LIMIT-UPPER (%)	Not available.
EXPLOSIVE LIMIT-LOWER (%)	Not available.
EXPLOSIVE LIMIT-UPPER (%)	Not available.
VAPOR PRESSURE:	Not available.
VAPOR DENSITY:	Not available.
RELATIVE DENSITY:	1.49 lbs/gal
SOLUBILITY(IES):	
SOLUBILITY IN WATER:	Not available.
PARTITION COEFFICIENT (N-OCTANO/WATER):	Not available.
AUTO-IGNITION TEMPERATURE:	Not available.

DECOMPOSITION TEMPERATURE:	Not available.
THERMAL DECOMPOSITION:	Not available.
VISCOSITY:	Not available.
SOLVENT CONTENTS:	
ORGANIC SOLVENTS:	Not available.
VOC CONTENT:	Not available.
SOLID CONTENT:	Not available.
OTHER INFORMATION:	
DISPERSION PROPERTIES:	See solubility in water.
WATER/OIL DIST. COEFF:	Not available.
%VOLATILE (BY WT.):	Not available.
VOLATILITY	Not available.
SPECIFIC GRAVITY	Not available.

10. STABILITY AND REACTIVITY

REACTIVITY:	No further relevant information available.
CHEMICAL STABILITY:	This is a stable product under normal (ambient) temperature and pressure.
POSSIBILITY OF HAZARDOUS REACTIONS:	Boric acid is a weak acid that may cause corrosion of base metals. Reaction with strong reducing agents such as metal hydrides or alkali metals will generate hydrogen gas which could create an explosive hazard.
CONDITIONS TO AVOID:	High heat or fire conditions. Do not allow to evaporate to dryness.
INCOMPATIBILITY (Material to Avoid):	Avoid contact with combustible, organic, or other readily oxidizable materials. Avoid contact with strong reducing agents.
HAZARDOUS DECOMPOSITION PRODUCTS:	Material will not burn, but when heated and water is lost metaboric acid is formed which with further heating may form boric oxide.

11. TOXICOLOGICAL INFORMATION

INFORMATION ON THE TOXICOLOGICAL EFFECTS

ACUTE TOXICITY:

Boric acid (10043-35-3)

LD50 Oral: 3,450- 4,080mg/kg (rat)

LD50 Dermal: >2,000mg/kg (rabbit)

LD50 Inhalation: >2.0mg/L (rat)

IF IHNALED:	No data available.
IF IN EYES:	No data available.
IF ON SKIN:	No data available.
IF SWALLOWED:	No data available.
CARCINOGENICITY:	Not listed in NTP, IRAC or by OSHA
TERATOLOGY:	No data available.
REPRODUCTION:	Suspected of damaging fertility or the unborn child. NOAEL in Rats for developmental effects on the fetus including fetal weight loss and minor skeletal variations is 55mg boric acid/ kg or 9.6mg B/kg.
MUTAGENICITY:	No data available.

12. ECOLOGICAL INFORMATION

ECOTOXICITY:

Boric acid (10043-35-3)

LC50: 10mg B/L (Chlorella pyrenoidosa)

LC50: 28mg B/L (Selenastrum capricornutum)

LC50: 1,376mg B/L (Chironomus decorus)

LC50: 627mg B/L (Onchorhynchus tschawytscha)

LC50: 104mg B/L (Bufo fowleri)

AQUATIC TOXICITY:	Avoid release into any water systems including sewers. Runoff from fire control or dilution water may cause pollution.
PERSISTENCE & DEGRADIBILITY:	No data available.
BIOACCUMULATIVE POTENTIAL:	This product is not bioaccumulative.
MOBILITY IN SOIL:	This product is soluble in water and is leachable through normal soil. Adsorption to soils or sediments is insignificant.
OTHER ADVERSE EFFECTS:	No data available.
GENERAL NOTES:	Do not allow undiluted or large quantities to reach ground water, water courses, or sewage systems.

13. DISPOSAL CONSIDERATIONS

Consult federal, state and local regulations for disposal requirements.

14. TRANSPORT INFORMATION

BASIC SHIPPING DESCRIPTION:

PROPER SHIPPING NAME: Mor-Bor 17.
HAZARD CLASSES: Not available.
IDENTIFICATION NUMBER: Not available.
PACKING GROUP: Not available.
HAZARDOUS SUBSTANCE: No
MARINE POLLUTANT: No

ADDITIONAL INFORMATION:

Other DOT Requirements:

REPORTABLE QUANTITY: Not available.
PLACARD(S): Not available.
LABEL(S): Not available.
USCG Classification: Class 43, Misc. water solutions, Chris Code: PTF

INTERNATIONAL TRANSPORTATION:

IMO: Not regulated
IATA: Not regulated
TDG (Canada): Not regulated
ADR (Europe): Not regulated
ADG (Australia): Not regulated

EMERGENCY RESPONSE GUIDE: Not applicable
ERAP – CANADA: Not applicable
Special Precaution: None

15. REGULATORY INFORMATION

SAFETY, HEALTH, AND ENVIRONMENTAL REGULATION/LEGISLATION SPECIFIC FOR THE SUBSTANCE OR MIXTURE

SARA (Superfund Amendments and Reauthorization):

Section 355 (extremely hazardous substances):

None of the ingredients are listed.

Section 313 (Specific toxic chemical listings):

None of the ingredients are listed.

TSCA (Toxic Substances Control Act):

Water (7732-18-5)

PROPOSITION 65:

Chemicals known to cause cancer:

None of the ingredients are listed.

Chemicals known to cause reproductive toxicity for females:

None of the ingredients are listed.

Chemicals known to cause reproductive toxicity for males:

None of the ingredients are listed.

Chemicals known to cause developmental toxicity:

None of the ingredients are listed.

CARCINOGENIC CATEGORIES:

EPA (Environmental Protection Agency)

None of the ingredients are listed.

TLV (Threshold Limit Value established by ACGIH)

None of the ingredients are listed.

NIOSH-Ca (National Institute for Occupational Safety and Health)

None of the ingredients are listed.

OSHA-Ca (Occupational Safety & Health Administration)

Corrosive to eyes.

GHS label elements:

This product is classified and labeled according to the Globally Harmonized System (GHS)

Hazard pictograms:



GHS08

Signal word: Warning

Hazard statements:

Suspected of damaging fertility or the unborn child.

Precautionary statements:

Refer to sections 2 and 4.

National regulations:

This product is subject to be labeled according with the prevailing version of the regulations on hazardous substances.

State Right to Know:

None of the ingredients are listed.

Chemical safety assessment:

A chemical safety assessment has not been carried out

16. OTHER INFORMATION/PREPARATION DATE

NOTICE TO READER:

The buyer assumes all risk in connection with the use of this material. The buyer assumes all responsibility for ensuring this material is used in a safe manner in compliance with applicable environmental, health and safety laws, policies and guidelines. Genesis Agri Products, Inc. assumes no responsibility or liability for the information supplied on this sheet, including any damages or injury caused thereby. Genesis Agri Products does not warrant the fitness of this material for any particular use and assumes no responsibility for injury or damage caused directly or indirectly by or related to the use of the material. The information contained in this sheet is developed from what Genesis Agri Products, Inc. believes to be accurate and reliable sources, and is based on the opinions and facts available on the date of preparation.

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