

NUTRISOL

Boron UN

Coastal AgroBusiness, Inc.

PO Box 856

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Greenville NC 27835

(252)756-1126

Emergency Phone Numbers:

Chemtrec(24 hrs): 1-800-424-9300

Coastal(Weekdays): 1-800-758-3456

IDENTITY

Trade Name: Nutrisol Boron UN

EPA Reg. No.: Not Applicable

Common Name: Liquid Boron w/ Urea Nitrogen

Chemical Family: Polyborate Compound and Urea

INGREDIENT

Component	CAS NO.	WT%	PEL/TLV
Polyborate compound	Proprietary	38.8	NOL/NOL

*Polyborate compound derived from boric acid and mixture of cyclic amines. Contains Urea. (3.5%Boron(B) 5%Nitrogen(N)). All ingredients in this product are listed in the T.S.C.A. Inventory. This product contains no listed hazardous ingredients.

PHYSICAL AND CHEMICAL CHARACTERISTICS

Appearance and Odor: Clear/slight yellow tinge, slightly viscous liquid w/ a mild odor.

Boiling Point: >200°F

Melting Point: Not Determined

Vapor Pressure: 0.2 mm Hg

Vapor Density (Air=1): 2.0 @ air=1

% Volatility (V/V): 15%

Octanol/H₂O Partition Coef.: Not Determined

pH: 7.5 (10% aqueous solution)

Saturation in air (V/V): Not Determined

Specific Gravity (H₂O=1): 1.199

Solubility in Water: Completely miscible in water

Viscosity: ≈1.3 cps @ 25°C

FIRE AND EXPLOSION DATA

Flash Point: >200°F

Flammable Limits in Air (V/V):

LEL: Not Determined

UEL: Not Determined

Auto-Ignition Temperature:

Not Determined

Fire Extinguishing Media: Foam, CO₂, Dry Chemical, and Water; Class BC, ABC Fire Extinguisher

Fire Control Tactics: Self-contained positive pressure breathing apparatus and protective clothing should be worn in fighting fires involving chemicals. Clear fire area of unprotected personnel. Cool fire exposed containers with water. Attack from upwind.

Unusual Fire and Explosion Hazards:
None Known

NFPA HAZARD RATING

Health Hazard: 2-Moderately Hazardous

Fire Hazard: 1-Slightly Combustible

Reactivity: 0-Stable

Specific Hazard: None

REACTIVITY DATA

Stability: Stable

Conditions to Avoid: Extreme Temperatures (above 250°C)

Incompatibility (Materials to Avoid):

Strong organic acids and oxidizing agents.

Hazardous Decomposition Products:

May form carbon dioxide, carbon monoxide, formaldehyde, nitrogen compounds.

Hazardous Polymerization: Will not occur.

HEALTH HAZARD INFORMATION

Threshold Limit Value: NOL

Permissible Exposure Limit: NOL

Warning Statements: Avoid contact with eyes, skin, and clothing. Harmful if swallowed or inhaled. Do not take internally. Keep out of reach of children.

Signs and Symptoms of Exposure:

Irritation of skin and eyes. Contact with eyes is painful and irritating.

Overexposure: Prolonged skin contact may cause moderate irritation. May cause severe eye injury.

Medical Conditions Generally

Aggravated by Exposure: Preexisting eye and skin disorders may be aggravated by exposure to this product. Unnecessary exposure to this product or any chemical should be avoided.

Primary Route of Exposure: Dermal

Acute Toxicity Data:

1. Oral Toxicity:

LD₅₀>500mg/kg

2. Dermal Toxicity:

LD₅₀>1500mg/kg

3. Inhalation Toxicity:

May irritate nasal passages and upper respiratory tract.

4. Eye Irritation: Moderate to Severe

5. Skin Irritation/Sensitization:

Moderate (Prolonged Exposure)

Chronic Toxicity Data: This product is not carcinogenic teratogenic or mutagenic as determined by OSHA, NTP, or IARC.

Emergency and First Aid Procedures:

1. If swallowed: Give large amounts of water and induce vomiting. Get immediate medical attention. Never induce vomiting or give anything by mouth to an unconscious person.

2. If Inhaled: Remove person from area of exposure. Give artificial respiration if necessary. If breathing is difficult, seek immediate medical attention.

3. If in Eyes: Immediately flush eyes with plenty of water for at least fifteen minutes, holding eyelids apart to ensure flushing of the entire eye surface. Seek medical attention.

4. If on Skin: Remove contaminated clothing and wash with large amounts of soap and water. If irritation develops, contact a physician.

SPECIAL PROTECTION INFORMATION

Respiratory Protection: None required with adequate ventilation.

Eye Protection: Avoid contact with eyes. Wear full face shield or chemical splash goggles when handling.

Skin Protection: Avoid contact with skin. USDA accepted nitrile or neoprene rubber gloves are recommended. Wear appropriate clothing to prevent repeated or prolonged skin contact.

Ventilation: Mechanical (general)

Other: It is recommended that a safety shower and eye wash be available. Wear protective clothing to prevent repeated or prolonged contact.

SPECIAL PRECAUTIONS AND SPILL/LEAK PROCEDURES

Handling and Storage: Keep container closed when not in use. Use with adequate ventilation. Avoid prolonged or repeated contact with skin. Wash thoroughly with soap and water after handling. Wash hands before breaks and at the end of work. Keep from freezing.

Steps To Be Taken In Case Material Is Released Or Spilled.

1. Small Spills: Soak up with absorbent and sweep or shovel into a suitable container for recovery or disposal.

2. Large Spills: Control and contain. Dike the spill to minimize contaminated area and facilitate salvage or disposal. Recover material for use, reprocessing or disposal.

Waste Disposal Methods: Dispose of in accordance with Local, State, and Federal regulations. Incineration in an authorized and permitted thermal treatment facility or chemical or biological treatment in authorized and permitted treatment facilities is recommended. Material collected with absorbent may be disposed of in a permitted landfill in accordance with Federal, State, and Local regulations. Triple rinse container and dispose of in accordance with all Local, State, and Federal regulations or offer for recycling.

SHIPPING DATA

(PACKAGE AND BULK)

D.O.T. Proper Shipping Name:

Not Regulated

D.O.T. Hazard Classification:

Primary: Not Applicable

Secondary: Not Applicable

D.O.T. Labels Required: None
D.O.T. Placards Required: None
Poison Constituent: Not Applicable
Hazardous Substance: None
Reportable Quantity (RQ):
Product: Not Applicable
Ingredient: Not Applicable
Bill of Landing Description: Fertilizer compounds, NOS
Transportation Emergency #:
CHEMTREC: (800)424-9300

ADDITIONAL REGULATORY INFORMATION

Sara Title III Data:**Section 311 and 312 Hazard Categories:**

Immediate Health Hazard:	Y
Delayed Health Hazard:	N
Fire Hazard:	N
Reactive Hazard:	N
Sudden Pressure Release Hazard	N

Section 302:

EHS: None
TPQ: 10,000 lbs.

Section 313: N/A**CERCLA Reportable Quantity:** N/A**Other:** Product is exempt from tolerance under FIFRA (40 CFR Part 180.1001(c)).**National Response Center:**
(800)424-8802**CHEMTREC:** (800)424-9300

The information and statements herein are believed to be reliable and are given in good faith but are not to be construed as a warranty or representation for which we assume legal responsibility. Users should undertake sufficient verification and testing to determine the suitability for their own particular purpose of any information or products referred to herein. NO WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE IS MADE.

MSDS NO.: 11313**DATE PREPARED:** 12/15/97**DATE REVISED:** 3/7/03**APPROVED:** *JM Pearce*