

N-Boost

GHS SAFETY DATA SHEET

Section 1. Identification

Product Form: Liquid Mixture

Product Name: N-Boost

Product Use: Fertilizer

Manufacturer/Supplier: Donaghys Ltd

Address: 63 Bradshaw Street, Dunedin, New Zealand

General Information: ++64-3-983-4100

Transportation Emergency Number: CHEMTREC: 800-424-9300

Section 2. Hazards Identification

GHS Classification:

Health

Skin Irritation Category 2, H316

Eye Irritation Category 2B, H320

Specific Target Organic Toxicity Single Exposure STOT SE Category 3, H335

GHS Label:

Symbols:



GHS07 – Warning

Hazard Statements

H315 - Causes skin irritation

H320 - Causes eye irritation

H335 - May cause respiratory irritation

Precautionary Statements

P261 Do not breathe mist/vapors.

P264 Wash thoroughly after handling.

P233 Keep container tightly closed.

P271 Use only in a well-ventilated area.

P280 Wear protective gloves, protective clothing and eye/face protection.

P233+P403 Store container tightly closed in cool/well-ventilated place.

P302+P352 If on skin: Wash with plenty of water.

P304+P340 If inhaled: Remove person to fresh air and keep comfortable for breathing

P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

P312 - Call a poison center/doctor/... if you feel unwell

P321 - Specific treatment (see ... on this label)

P332+P313 If skin irritation occurs: Get medical advice/attention

P337+P313 If eye irritation persists: Get medical advice/attention

P362 Take off contaminated clothing and wash before reuse

Section 3. Composition / Information on Ingredients

Component	CAS Number	Weight %(w/v)
Yeast, extract, (non-live)	8013-01-2	Max. 3%
Lactobacillus casei (non-live)	68333-14-2	Max. 1.5%
Lactobacillus acidophilus (non-live)	68333-16-4	Max. 1.5%
Water	7732-18-5	Remainder (Min. 83%)

Section 4. First Aid Measures

Eye: Eye irritation. Flush immediately with large amounts of water for at least 15 minutes. Eyelids should be held away from the eyeball to ensure thorough rinsing. Get medical attention if pain, blinking or redness persist.

Skin: Immediately flush the skin with mild soap and water. Remove contaminated clothing and shoes. Wash contaminated clothing before reuse.

Inhalation: Ensure fresh air for breathing. Allow to rest in a position comfortable for breathing. If respiratory symptoms persist get medical advice/attention.

Ingestion: Get immediate medical attention. Do not induce vomiting. Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

Important Symptoms and Effects: Not expected to present a significant hazard under anticipated conditions of normal use.

Indication of any immediate medical attention or special treatment: No additional information available.

Section 5. Fire Fighting Measures

Suitable Extinguishing Media: Use dry chemical, foam, carbon dioxide, sand or water spray to extinguish fire based on surrounding materials. Water spray or fog can be used to cool fire-exposed containers, structures and to protect personnel. Use water to dilute spills.

Fire Fighting Procedures: Do not flush down sewers or other drainage systems. Exposed firefighters must wear breathing apparatus with full-face mask and full protective clothing.

Unusual Fire and Explosion Hazards: None.

Combustion Products: Irritating or toxic substances may be emitted upon thermal decomposition. Thermal decomposition products may include oxides of carbon and nitrogen.

Section 6. Accidental Release Measures

Keep unnecessary people away (also see Section 8).

Do not flush to sewer or waterways. Prevent release to the environment if possible. Refer to Section 15 for spill/release reporting information.

Soak up spills with inert solids such as clay as soon as possible. Collect spillage and store away from other materials.

Section 7. Handling and Storage

Handling

Do not get in eyes, on skin or on clothing. Do not breathe vapors or mists. Keep container closed. Use only with adequate ventilation. Use good personal hygiene practices. Wash hands before eating, drinking, smoking. Remove contaminated clothing and clean before re-use.

Storage

Store in tightly closed containers in cool, dry, and well-ventilated areas. Store out of direct sunlight. Keep out of reach of children. Keep containers tightly closed and upright when not in use. Protect against physical damage. Incompatible products include strong bases, strong acids and oxidising agents.

Section 8. Exposure Controls / Personal Protection

Exposure Limits: No further data available.

Engineering Controls: Use in well ventilated conditions.

Personal Protective Equipment (PPE)

Eye Protection: Wear chemical safety goggles and face shield. Have eye-wash stations available where eye contact can occur.

Skin Protection: Avoid skin contact. Wear gloves impervious to conditions of use. Additional protection may be necessary to prevent skin contact including use of coveralls, eye/face protection, boots or full body protection. In case of inadequate ventilation, wear respiratory protection.

Respiratory Protection: If exposure limits are exceeded, NIOSH approved respiratory protection should be worn.

Hygiene Precautions: Do not eat, drink or smoke when using this product.

Section 9. Physical and Chemical Properties

Flashpoint: N/A

Autoignition Temperature: N/A

Boiling Point: 100.9°C (213.6°F) @ 760 mm Hg

Melting Point: -3.4°C (38.1°F) @ 760 mm Hg

Vapor Pressure: 2.3 kPa at 20°C

Vapor Density(Air=1): : similar to water at 0.804 g/L

% Solubility in Water: Complete. Solubility of urea (component) in water 107.9 g/100 ml (20 °C)

Pour Point: N/A

Molecular Formula: Mixture

Odor/Appearance: Brown liquid with sweet fruity odor.

Lower Flammability Limit: N/A

Upper Flammability Limit: N/A

Specific Gravity: 1.01g/ml @ 20°C

% Volatile: N/A

Evaporation Rate (Water=1): 1

Viscosity: 1.08 cP @ 25°C

Octanol/Water Partition Coefficient: No data available

pH: 3.2 - 4.2

Molecular Weight: Mixture

Section 10. Stability and Reactivity

Stability/Incompatibility: Incompatible with strong bases, strong acids and oxidising agents.

Avoid storage in direct sunlight. Keep in cool shaded conditions.

Hazardous Reactions/Decomposition Products: Decomposition products may include oxides of carbon.

Section 11. Toxicological Information

Signs and Symptoms of Overexposure: Eye and nasal irritation, headache, dizziness, nausea, vomiting, heart palpitations, difficulty breathing, cyanosis, tremors, weakness, itching or burning of the skin.

Acute Effects:

Eye Contact: Causes eye irritation, pH 3.6 to 4.2.

Skin Contact: Causes skin irritation pH 3.6 to 4.2.

Inhalation: May cause respiratory irritation.

Specific Target Organ Effects: May cause respiratory irritation.

Chronic Effects: Not classified. Based on available data, the classification criteria are not met.

Medical Conditions Aggravated by Exposure: Pre-existing diseases of the respiratory tract or gastrointestinal tract.

Acute Toxicity Values

Component	CAS Number	Oral LD ₅₀ (Rat)	Dermal LD ₅₀ (Rat)	Dermal LD ₅₀ (Rabbit)
Yeast, extract, (non-live)	8013-01-2	none established	none established	none established
Lactobacillus casei (non-live)	68333-14-2	none established	none established	none established
Lactobacillus acidophilus (non-live)	68333-16-4	none established	none established	none established
Water	7732-18-5	90000 mg/kg	none	none

Section 12. Ecological Information

Bioaccumulation is not expected to be significant. This product is readily biodegradable.

Section 13. Disposal Considerations

Dispose of in a safe manner according to local, regional/state and national/federal authority requirements.

Section 14. Transport Information

In accordance with Department of Transport. Not regulated for transport.

Section 15. Regulatory Information

U.S. Federal Regulations

Toxic Substances Control Act (TSCA): N-Boost 5 is not listed on the United States TSCA Inventory. All components of this product are included on or exempted from the United States TSCA inventory.

Clean Water Act (CWA): None of the chemicals in this product are listed as Hazardous Substances under the CWA. None of the chemicals in this product are listed as Priority Pollutants under the CWA. None of the chemicals in this product are listed as Toxic Pollutants under the CWA.

Clean Air Act (CAA): This material does not contain any hazardous air pollutants. This material does not contain any Class 1 nor Class 2 Ozone depleters.

Superfund Amendments and Reauthorization Act (SARA) Title III Information:

CERCLA Hazardous Substances and corresponding RQs. None of the chemicals in this material have an RQ.

SARA Section 302 Extremely Hazardous Substances. None of the chemicals in this product have a TPQ.

Section 313. No chemicals are reportable under Section 313.

SARA Section 311/312 (40 CFR 370) Hazard Categories:

Immediate Hazard: No

Delayed Hazard: No

Fire Hazard: No

Pressure Hazard: No

Reactivity Hazard: No

State Regulations

California: This product contains the following chemical(s) known to the State of California to cause cancer, birth defects or reproductive harm:

Component	CAS Number	Maximum %
Cobalt Sulfate Heptahydrate*	10026-24-1	0.003%

*Trace amount as part of nutrient media for microorganism production; cobalt now present largely in organic fixed form.

International Regulations

Canadian Environmental Protection Act: All of the components of this product are either included on the Canadian Domestic Substances list (DSL) or are hydrates of salts that are included on the DSL or are killed *Lactobacillus* bacteria that are Generally Recognised as Safe (GRAS).

Canadian Workplace Hazardous Materials Information System (WHMIS):

No additional information

European Inventory of Existing Chemicals (EINECS): All of the components of this product are included on EINECS.

EU Classification: Not classified.

EU Risk (R) and Safety (S) Phrases:

No additional information.

Section 16. Other Information

Revision Indicator: New MSDS

Disclaimer: The information contained herein is accurate to the best of our knowledge. Donaghys Ltd makes no warranty of any kind, express or implied, concerning the safe use of this material in your process or in combination with other substances.