

Safety Data Sheet

Section 1: Product Identifier

Product Name: N-TEXX[®] Bio Soil Enhancer 15-5-5

Product Code: NT15-5-5

Relevant identified uses of the substance or mixture and uses advised against

Recommended use: Intended as professional agricultural and horticultural fertilizer, soil amendment or in some cases a microbial adjuvant.

Details of the supplier of the safety data sheet

Manufacturer CXI (Chem-X International, LLC)
1100 East Sandy Lake Road
Coppell, Texas 75019
United States
www.cxinternational.com
infocxi@outlook.com

Telephone (General) +1 972-471-7775

Emergency telephone number

Manufacturer 214-533-9933

Section 2: Hazard Identification

United States (US)

According to OSHA 29 CFR 1910.1200 HCS

- Can irritate eyes and skin. May cause mucous membrane irritation. Can irritate digestion if ingested.
- OSHA hazard category – Irritant
- CERCLA Ratings: Health = 1, Fire = 0, Reactivity = 0, Persistence = 0

Section 3 - Composition/Information on Ingredients

| Hazardous Ingredients | % | CAS/ECHA NUM | LD ₅₀ of Ingredient (specify species and route) | LC ₅₀ of Ingredient (specify species) |
|----------------------------------|-------|---------------------------------|---|--|
| Not applicable | | | | |
| Non-Hazardous Ingredients | | | | |
| Urea | 15.00 | CAS 57-13-6 ECHA 200-315-5 | | |
| Potassium Nitrate | 5.00 | CAS 7757-79-1 ECHA 231-818-8 | | |
| Mono Ammonium Phosphate | 5.00 | CAS 7722-76-1 ECHA 231-764-5 | | |
| <i>Psuedomonas putida</i> | .0014 | | >5000 mg/kg; Sprague Dawley, Oral | 552,762.06 ppm; <i>Menidia beryllina</i> |
| <i>Bacillus subtilis</i> | .0014 | | >5000 mg/kg; Sprague Dawley, Oral | 552,762.06 ppm; <i>Menidia beryllina</i> |

Section 4: First-Aid Measures

Description of first aid measures

- **Eye exposure:** Flush immediately with copious amounts of tap water or normal saline (minimum of 15 minutes). Take exposed individual to a health care professional, preferably an ophthalmologist, for further evaluation.
- **Skin exposure:** Wash exposed area with plenty of soap and water. Repeat washing. Remove contaminated clothing and wash thoroughly before reuse. If irritation persists, consult a health care professional.
- **Inhalation:** If exposure by inhalation is suspected, immediately move exposed individual to fresh air. If individual experiences nausea, headache, dizziness, has difficulty in breathing or is cyanotic, seek a health care professional immediately.
- **Ingestion**
INDUCE VOMITING. Rinse with copious amounts of water or milk, first. Irrigate the esophagus and dilute stomach contents by slowly giving one (1) to two (2) glasses of water or milk. Avoid giving alcohol or alcohol related products. In cases where the individual is semi-comatose, comatose or convulsing, DO NOT GIVE FLUIDS BY MOUTH. In case of intentional ingestion of the product seek medical assistance immediately; take individual to nearest medical facility. NOTE TO PHYSICIAN: No specific antidote is known. Probable mucosal damage may contraindicate the use of gastric lavage. Treat Symptoms.

Most important symptoms and effects, both acute and delayed

- Refer to Section 11 - Toxicological Information.

Section 5: Fire-Fighting Measures

Extinguishing media

- Flammable limits: Not flammable
- Extinguishing media: Water fog, carbon dioxide, foam, dry chemical.
- Special firefighting procedures: Fire fighters should wear full protective gear, including self-contained breathing apparatus.

Section 6 - Accidental Release Measures

Personal precautions, protective equipment and emergency procedures

Personal Precautions

- Before responding to a spill or leak of this product, review each section of this SDS. Follow the recommendations given in the Handling Precautions sections. Check the Fire and Explosion Data section to determine if the use of non-sparking tools is merited. Insure that spilled or leaked product does not come into contact with materials listed as incompatible. If irritating fumes are present, consider evacuation of enclosed

Emergency Procedures

- Initially minimize area affected by the spill or leak. Block any potential routes to water system (e.g., sewers, streams, lakes, etc.). Based on the product's toxicological and chemical properties, and on the size and location of the spill or leak, assess the impact on contaminated environments (e.g. water systems, ground, air equipment, etc.). There are no methods available to completely eliminate any toxicity this product may have on aquatic environments. Minimize adverse effects on these environments. CXI can be contacted for technical assistance. Determine if federal, state and/or local release notification is required (see Regulatory Classifications section of this MSDS). Recover as much of the pure product as possible into appropriate containers. Later, determine if this recovered product can be used for its intended purpose. Address clean-up of contaminated environments. Spill or leak residuals may have to be collected and disposed of. Clay, soil or commercially available absorbents may be used to recover any material that cannot readily be recovered as pure product. Flushing residual material to an industrial sewer, if present at the site of a spill or leak incident, may be acceptable if authorized approval is obtained. If product and/or spill/leak residuals are flushed to an industrial sewer, insure that they do not come into contact with incompatible materials. Contact the person(s) responsible for the operation of your facility's industrial sewer system prior to intentionally flushing or pumping spills or leaks of this product to the industrial sewer.

Environmental precautions

- Avoid run off to waterways and sewers.

Methods and material for containment and cleaning up

Containment/ Clean-up Measures

- Determine if waste containing this product can be handled by available industrial effluent system or other on-site waste management unit. If off-site management is required, contact a company experienced in industrial waste management. This product is not specifically listed in 40 CFR 261 as a Resource Conservation and Recovery Act (RCRA) hazardous waste. However, spill or leak residuals may meet the criteria of a characteristic hazardous waste under this Act. Check the characteristics of the material to be disposed of and/or the physical and reactivity data given in this SDS for the neat product. Clean up with mopping and absorption techniques common to non-hazardous spills. Prevent contamination of potable water systems.
- Empty containers, as defined by appropriate sections of the RCRA, are not RCRA hazardous wastes. However, insure proper management of any residuals remaining in container.

Container Disposal

Section 7 - Handling and Storage

Precautions for safe handling

Handling

- Eye wash fountains in the work place are strongly recommended. Rubber gloves, safety glasses or goggles, body-protective clothing and shoes are recommended.

Conditions for safe storage, including any incompatibilities

Storage

- Keep/store only in original container. Store in a well-ventilated place. Keep container tightly closed. Do not store together with: Combustible substance, reducing agents. Best stored inside out of direct sunlight between 50°-90°F.

Incompatible Materials or Ignition Sources

- Non-flammable but nitrogen oxides, biuret, cyanuric acid could form if exposed to flame. Corrosive to aluminum and iron.

Section 8 - Exposure Controls/Personal Protection

Control parameters

- Data lacking

Exposure controls Engineering Measures/Controls

- Adequate ventilation systems as needed to control concentrations of airborne contaminants below applicable exposure limit values.

Personal Protective Equipment Pictograms



Respiratory Eye/Face Hands

- Standard surgical mask for precautionary purposes.
- Wear safety goggles.
- Most standard household rubber gloves are sufficient. Precautionary purposes only.

Skin/Body

- Wear long sleeved shirt and long pants as precautionary measure.

General Industrial Hygiene Considerations

- Handle in accordance with good industrial hygiene and safety practice. Wash thoroughly with soap and water after handling and before eating, drinking, or using tobacco. Safety shower and eye wash should be available close to work areas.

Environmental Exposure Controls

- Follow best practice for site management and disposal of waste. Avoid release to the environment.

Section 9 - Physical and Chemical Properties

Information on Physical and Chemical Properties

| Material Description | | | |
|----------------------|--------------|------------------------|--------------|
| Physical Form | Liquid | Appearance/Description | Blue liquid |
| Color | Blue | Odor | None |
| Taste | Data lacking | Particulate Type | Not relevant |
| Particulate Size | Not relevant | Aerosol Type | Not relevant |

| | | | |
|---|--|---|----------------------------------|
| Odor Threshold | Data lacking | Physical and Chemical Properties | Data lacking |
| General Properties | | | |
| Boiling Point | 212 F(100 C) | Melting Point | Data lacking |
| Decomposition Temperature | Data lacking | Heat of Decomposition | Data lacking |
| pH | 8.0 | Specific Gravity/Relative Density | 10.0 lbs Gal. or 1.198 Kg./L |
| Density | 1.1982 g/mL | Bulk Density | Data lacking |
| Water Solubility | 100% | Solvent Solubility | Data lacking |
| Viscosity | Not relevant | Explosive Properties | Classification criteria not met. |
| Oxidizing Properties: | Nitrogen Oxides, biuret, cyanuric acid | | |
| Volatility | | | |
| Vapor Pressure | 17 mm Hg. | Vapor Density | Data lacking |
| Evaporation Rate | Data lacking | VOC (Wt.) | Data lacking |
| VOC (Vol.) | Data lacking | Volatiles (Wt.) | Data lacking |
| Volatiles (Vol.) | Data lacking | | |
| Flammability | | | |
| Flash Point | 170 F | UEL | Data lacking |
| LEL | Data lacking | Auto ignition | Non flammable |
| Self-Accelerating Decomposition Temperature (SADT) | Data lacking | Heat of Combustion (ΔH_c) | Data lacking |
| Burning Time | Data lacking | Flame Duration | Data lacking |
| Flame Height | Data lacking | Flame Extension | Data lacking |
| Ignition Distance | Data lacking | Flammability (solid, gas) | Classification criteria not met. |
| Environmental | | | |
| Half-Life | Data lacking | Octanol/Water Partition coefficient | Data lacking |
| Coefficient of water/oil distribution | Data lacking | Bioaccumulation Factor | Data lacking |
| Bio concentration Factor | Data lacking | Biochemical Oxygen Demand BOD/BOD5 | Data lacking |
| Chemical Oxygen Demand | Data lacking | Persistence | Data lacking |
| Degradation | Data lacking | | |

Section 10: Stability and Reactivity

Reactivity

- No dangerous reaction known under conditions of normal use.

Chemical stability

- Stable under normal temperatures and pressures.

Possibility of hazardous reactions

- Hazardous polymerization will not occur.

Conditions to avoid

- High temperatures, sparks, open flames and live electrical circuits.

Incompatible materials

- None identified

Hazardous decomposition products

- Data lacking

Section 11 - Toxicological Information

Information on toxicological effects

| Component Name | CAS | Data |
|----------------------------------|-----|---|
| N-TEXX® Bio Soil Enhancer 15-5-5 | | Acute Toxicity: orl-rat LD50: > 5000 mg/kg bw; ihl Data lacking; skn-rat LD50: > 5000 mg/kg bw Irritation: eye-rbt Non-irritating; skn-rbt Non-Irritating; Reproductive: orl-rat Non-toxic |

| GHS Properties | Classification |
|-------------------------------|--|
| Acute toxicity | OSHA HCS 2012 • Classification criteria not met |
| Aspiration Hazard | OSHA HCS 2012 • Classification criteria not met |
| Carcinogenicity | OSHA HCS 2012 • Classification criteria not met |
| Germ Cell Mutagenicity | OSHA HCS 2012 • Classification criteria not met |
| Respiratory sensitization | OSHA HCS 2012 • Classification criteria not met |
| Serious eye damage/Irritation | OSHA HCS 2012 • Classification criteria not met |
| Skin corrosion/Irritation | OSHA HCS 2012 • Classification criteria not met |
| Skin sensitization | OSHA HCS 2012 • Classification criteria not met |
| STOT-RE | OSHA HCS 2012 • Classification criteria not met |
| STOT-SE | OSHA HCS 2012 • Specific Target Organ Toxicity Single Exposure: None |
| Toxicity for Reproduction | OSHA HCS 2012 • Classification criteria not met |

Target Organs . None

Route(s) of entry/exposure . Skin, Eye, Ingestion

Potential Health Effects

Inhalation

- Acute (Immediate)** . Non-Toxic
- Chronic (Delayed)** . No data available.

Skin

- Acute (Immediate)** . Non-Toxic

Chronic (Delayed) • No data available

Eye

Acute (Immediate) • Non-Toxic

Chronic (Delayed) • No data available.

Ingestion

Acute (Immediate) • May cause irritation.

Chronic (Delayed) • No data available.

Section 12 - Ecological Information

Toxicity

Aquatic toxicity

- 96-h LC50 552,762 mg/L freshwater fish (literature information)
- 48-h LC50 353,302 mg/L marine water fish (literature information)

Persistence and degradability

- Will persist in soil as a beneficial microbe and nutrient fertilizer source as determined by specific environmental factors where applied.

Bioaccumulative potential

- Maintains a symbiotic relationship with plant roots and indigenous soil microbial fauna and plant growth systems.

Mobility in soil

- Typically stable unless affected by intense flooding or other natural or unnatural causes.

Other Environmental Effects

- None known.

Section 13 - Disposal Considerations

Waste treatment methods

Product waste

- Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

Packaging waste

- Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

Section 14 - Transport Information

| | 14.1 UN number | 14.2 UN proper shipping name | 14.3 Transport hazard class(es) | 14.4 Packing group | 14.5 Environmental hazards |
|-----------|----------------|------------------------------|---------------------------------|--------------------|----------------------------|
| DOT | | Non-Flammable liquid | Not regulated | III | None |
| TDG | | Non-Flammable liquid | Not regulated | III | None |
| IMO/IMDG | | Non-Flammable liquid | Not regulated | III | None |
| IATA/ICAO | | Non-Flammable liquid | Not regulated | III | None |

Special precautions for user

- None specified.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

- This product is provided only in non-bulk containers and packaged polyurethane containers.

Section 15 - Regulatory Information

Safety, health and environmental regulations/legislation specific for the substance or mixture

SARA Hazard Classifications

The following Regulations are known to apply to the use and disposal of this product. Additional federal, state and local regulations may also be applicable.

SARA (Superfund Amendments and Reauthorization Act): SARA 302 Extremely Hazardous Substances List: No components of this product are listed.

SARA 312 Hazard Category: Immediate (Acute) Health Hazard.

SARA 313 Toxic Chemicals List: No Section 313 listed substances are present above de minimum levels.

CERCLA (Comprehensive Environmental Response, Compensation and Liability Act): No components of this product are listed.

RCRA (Resource Conservation and Recovery Act) Listed Hazardous Wastes: No components of this product are listed.

CWA (Clean Water Act) Listed Substances: No components of this product are listed.

TSCA (Toxic Substances Control Act) Applicability: The components of this product are listed on the TSCA inventory or are exempted from the TSCA inventory.

FIFRA (Federal Insecticide, Fungicide and Rodenticide Act): This product is not a registered pesticide.

HMIS/NPCA Ratings: Health 1; Flammability 0; Reactivity 0

NFPA Ratings: Health 1; Flammability 0; Reactivity 0

STATE REGULATIONS Various State Right to Know Acts: Non-proprietary hazardous chemicals are listed in Section 2 of this MSDS. Should you require further information on specific proprietary chemicals or inserts, please contact CXI Corporate Office.

Section 16 - Other Information

- Last Revision Date** ● 01 February 2018
- Preparation Date** ● 01 February 2018
- Disclaimer/Statement of Liability** ● The information contained herein is believed to be accurate but is not warranted to be so. Data and calculations are based on information furnished by the manufacturer of the product and manufacturers of the components of the product. Users are advised to confirm in advance of need that information is current, applicable and suited to the circumstance of use. Vendor assumes no responsibility for injury to vendee or third persons proximately caused by the material if reasonable safety procedures are not adhered to as stipulated in the data sheet. Furthermore, vendor assumes no responsibility for injury caused by abnormal use of this material even if reasonable safety procedures are followed. Any questions regarding this product should be directed to the manufacturer of the product as described in Section 1.

Key to abbreviations

NDA = No data available.