Material Safety Data Sheet
19-0-3 Golf
Issued May 30 2014

IDENTIFICATION
PRODUCT NAME: 19-0-3 Golf
CAS NO.: Mixture
CHEMICAL FAMILY: Organic amide mixture; dormant organic microbes
MOLECULAR WEIGHT: Not applicable
CHEMICAL WEIGHT: Not applicable
FORMULA: Not applicable
DOT CLASS: Not regulated by DOT

COMPOSITION
COMPOSITION (Typical) % CAS NO.
N-methyl-2-pyrrolidone 1.2 872-50-4
N-(n-butyl)-thiophosphoric triamide Proprietary 94317-64-3
Dicyanamide Proprietary 461-58-5
Endosporidia from Azobacter, Clostridium, and Bacillus Proprietary Proprietary
Ascophyllum Nodosum from Brown Seaweed Proprietary Proprietary
Other non-hazardous ingredients Proprietary Proprietary
Water Proprietary 7732-28-5

HAZARDOUS INGREDIENTS
Hazard Rating: (HMIS)
Health: 0 (Minimal)
Fire: 0 (Minimal)
Reactivity: 0 (Minimal)
Special Hazard: None

PHYSICAL & CHEMICAL INGREDIENTS
Appearance: dark aqua liquid
Odor: pungent
Density: 8.27 lb/gallon
pH: 6.5
Solubility: soluble
Evaporation Rate: N/A
Vapor Pressure: N/A
Melting Point: N/A
Boiling Point: 212° F

FIRE & EXPLOSION HAZARDS
Flashpoint: N/A
Flammable Limits: N/A
Extinguishing Media: Non-combustible; water, foam, fog, dry

Special Procedures: none
Explosion Hazard: none
Stability: stable

REACTIVITY DATA
Conditions to avoid: Extreme heat or fire
Incompatibility: strong oxidizing agents
Decomposition: none

HEALTH HAZARD
By-products: none
Polymerization: will not occur
Inhalation: none (recommend particle respirator)
Ingestion: Induce vomiting. Repeat until vomit is clear.
Skin: If irritation occurs, wash with water and mild detergent
Eye: Immediately flush eyes with clean water for 15 minutes. Call a physician.
**SPILL & DISPOSAL**

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Stop leak without risk, and dike to prevent loss or movement of product. Prevent large quantities from entering waterways. If uncontaminated, collect and reuse as product. If contaminated with other materials, collect in suitable containers.

WASTE DISPOSAL METHOD: Consult appropriate regulatory agencies, and dispose in accordance with applicable federal, state, and local regulators.

**PROTECTION**

RESPIRATORY PROTECTION: If visible mist is present, use NIOSH-approved dust respirators until feasible engineering controls are completed.

EYE PROTECTION: Tight-fitting goggles are recommended to reduce liquid or spray exposure to the eyes.

SKIN PROTECTION: Rubber or neoprene-coated gloves and suitable protective clothing are recommended to minimize skin exposure.

VENTILATION: Not normally required.

OTHER PROTECTIVE EQUIPMENT: Washing facilities should be available.

**PRECAUTION**

Avoid welding or burning on piping and valves that have contained Nutrex-M/F until they have been thoroughly rinsed with clean water. Salted out material may explode under conditions of confinement and high temperature.

Do not use zinc or copper (brass, bronze, etc) alloys in contact with Nutrex-M/F. Cast iron, malleable iron, and ductile iron are more susceptible to corrosion than aluminum or carbon steel. On storage tanks, be wary of plugs and fittings made of these materials. May salt out at temperature below freezing.

**DISCLAIMER**

MSDS information should be used as a supplement to other information gathered, including the experience of any person involved with this product. You must make independent determinations of suitability and completeness of the information from all sources to assure both the safety and health of personnel. No guarantee is made by Plant Essentials, LLC, nor is any liability assumed arising from any use of this information.