#468

MATERIAL SAFETY DATA SHEET

NFPA RATING: Health = 1 Flammability = 0 Reactivity = 0 HMIS RATING: Health = /1 Flammability = 0 Reactivity = 0

SECTION I - IDENTITY AND MANUFACTURER'S INFORMATION (497N-12B)

Manufacturer's Name: HILLYARD INDUSTRIES Product Name: TAKE DOWN (FRESH AND CLEAN)

Address: 302 North Fourth Street Date Prepared; January 12, 2000

St. Joseph, MO 64501 Prepared by: Regulatory Affairs Department

Emergency Telephone No.: (800)-424-9300 (Only in the event of chemical emergency involving a spill, leak, fire, exposure or accident involving chemicals.)

Other information calls: (816) 233-1321 (Ext. 8285)

http://www.hillvard.com

SECTION II - INGREDIENTS/IDENTITY INFORMATION

Components

(Specific Chemical Identity: OTHER LIMITS Common Name(s) CAS# **ACGIH TLV** OSHA PEL RECOMMENDED % 7732-18-5 none none N/A Mixture of Bacterial Spores N/A not established not established N/A Octylphenoxy Polyethoxy 9036-19-5 not established not established N/A Ethanol

V.O.S. of concentrate = 1.28%

SECTION III -- PHYSICAL / CHEMICAL CHARACTERISTICS

Bolling Point: $209^{\circ}F$ Specific Gravity $(H_2O = 1)$: $25^{\circ}C = 1.00 & 39^{\circ}C = 1.00$

Vapor Pressure (mm Hg.): 17.7 Percent Volatile by Volume (%): 92.9%

Vapor Density (AIR = 1): 0.6 Evaporation Rate (ethyl ether = 1): slower than 1

Solubility in Water: complete Appearance and Odor: Pale-yellow, translucent liquid, fresh

pH (concentrate) = 6-7 and clean odor

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

Flash point: None to Boiling (Tag Closed Cup) Flammable Limits: LEL = N/A UEL = N/A

Extinguishing Media: N/A

Special Fire Fighting Procedures: None known to manufacturer.

Unusual Fire and Explosion Hazards: None known to manufacturer.

SECTION V -- PHYSICAL HAZARDS

Stability: Stable Conditions to Avoid: Excessive hot or cold temperatures may kill microorganisms. Incompatibility (Materials to Avoid): Strong acids, alkalis or disinfectants may kill these microorganisms. Hazardous Decomposition Products or Byproducts: None known to manufacturer.

Hazardous Polymerization: Will not occur. Conditions to Avoid: None known to Hillyard.

SECTION VI -- HEALTH HAZARD DATA

Routes of entry: Inhalation? no Skin? no Ingestion? no HEALTH HAZARDS (1. Acute and 2. Chronic)

1. According to Primary Skin Irritation Test (FHSA), product concentrate is not an irritant; prolonged exposure may produce severe irritation in sensitive individuals; Eye Irritation Test (FHSA) = Concentrated product was considered to be an eye irritant; complete recovery was seen in all test subjects by day 13. When tested the concentrate was estimated to have acute oral LD₅₀ greater than 5 g./kg. When tested concentrate was not acutely toxic to the subjects following a 1 hour exposure to a concentration of 41.2 mg./L. (actual 41.2 mg./L.); thus LC₅₀ is greater than 41.2 mg./L. (actual 41.2 mg./L.). This is the maximum that could be generated with this test system.

2. None known to Hillyard.