MATERIAL SAFETY DATA SHEET - CATTLE-VAC EC

SECTION 1

IDENTITY: Bovine Pili Shield, Product # F200, F201

MANUFACTURER: Grand Laboratories, Inc., 1447 140th Street, Larchwood, IA 51241-9778

EMERGENCY TELEPHONE NUMBER: CHEMTREC - U.S. (800) 424-9300,

INTERNATIONAL: (703) 527-3887 (Collect)

TELEPHONE NUMBER FOR INFORMATION: (712) 477-2811, (605) 925-7611

DATE PREPARED: November 18, 1992 - July 2, 1998

SECTION 2 - HAZARDOUS INGREDIENTS/IDENTITY INFORMATION

HAZARODUS COMPONENTS (Specific Chemical Identity; Common Name(s)): Formaldehyde; OSHA PEL: 0.75 ppm; ACGIH TLV: 0.3 ppm; OTHER LIMITS

RECOMMENDED: ; % (optional): < 0.5

OTHER INGREDIENT INFORMATION:

HAZARODUS COMPONENTS (Specific Chemical Identity; Common Name(s)): Thimerosal (Merthiolate) Thimerosal is an organomercury compound; OSHA PEL: 0.01 mg of Hg / m3

ACGIH TLV: ; OTHER LIMITS RECOMMENDED: ; % (optional): < 0.03

SECTION 3 - PHYSICAL / CHEMICAL CHARACTERISTICS

BOILING POINT: NA

VAPOR PRESSURE (mm Hg): NA VAPOR DENSITY (AIR=1): NA SOLUBILITY IN WATER: Yes SPECIFIC GRAVITY (H20 = 1): NA

MELTING POINT: NA

EVAPORATION RATE (Butyl Acetate =1): NA APPEARANCE AND ODOR: Opaque liquid

SECTION 4 - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (Method Used): NA

FLAMMABLE LIMITS: NA

LEL: NA

UEL: NA

EXTINGUISHING MEDIA: Dry chemical or carbon dioxide

SPECIAL FIRE FIGHTING PROCEDURES: Wear protective clothing and a self-contained

breathing apparatus as appropriate for the surrounding fire.

UNUSUAL FIRE AND EXPLOSION HAZARDS: None

SECTION 5 - REACTIVITY DATA

STABILITY: Stable

CONDITIONS TO AVOID: Thimerosal will decompose with heat.

INCOMPATIBILITY (Materials to Avoid): None

HAZARDOUS DECOMPOSITION OR BYPRODUCTS: Mercury, carbon monoxide, or carbon

dioxide

HAZARDOUS POLYMERIZATION: Will not occur

CONDITIONS TO AVOID: None

SECTION 6 - HEALTH HAZARD DATA

ROUTE(S) OF ENTRY: INHALATION? Yes; SKIN? Yes; INGESTION? Yes

HEALTH HAZARDS (Acute and Chronic): The product may be irritating in the case of skin or eye contact. Thimerosal is a toxic compound.

CARCINOGENICITY: NTP? Yes; IARC MONOGRAPHS? Yes; OSHA REGULATED? Yes EMERGENCY AND FIRST AID PROCEDURES: In case of skin or eye contact, flush with plenty of water. If the product is ingested, wash the mouth out with water and call a physician. In case of accidental injection, wash the puncture site and see a physician immediately.

SECTION 7 - PRECAUTIONS FOR SAFE HANDLING AND USE

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Clean up the spill with absorbent material, and afterwards, wash the site thoroughly with water.

WASTE DISPOSAL METHOD: Dispose in accordance with all applicable federal, state and local environmental regulations.

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING: Refrigerate the product (40°F). Keep the container closed when stored, and shake well before using.

OTHER PRECAUTIONS: NA

SECTION 8 - CONTROL MEASURES

RESPIRATORY PROTECTION (Specify Type): An approved cartridge respirator for large spills

VENTILATION: LOCAL EXHAUST: No; MECHANICAL (General): Yes; SPECIAL: NA;

OTHER: NA

PROTECTIVE GLOVES: Vinyl or nitrile

EYE PROTECTION: Goggles

OTHER PROTECTIVE CLOTHING OR EQUIPMENT: NA

WORK / HYGIENIC PRACTICES: Take precautions to prevent accidental injections

SECTION 9 - REGULATORY INFORMATION

COMPONENT: Thimerosal

Mercury compounds, such as thimerosal, are subjects to CWA, SDWA, CAA, RCRA, CERCLA,

SARA, and DOT regulations. COMPONENT: Formaldehyde

Refer to OSHA's General Industry Standard, 29 CFR 1910.1048. The threshold planning quantity of SARA Title III is 10,000lbs.

CERCLA's reportable quantity is 1,000lbs.

This Material Safety Data Sheet and the information it contains is offered to you in good faith as accurate. We have reviewed any information contained in this data sheet which we received from sources outside our company. We believe that information to be correct but cannot guarantee its accuracy or completeness. Health and safety precautions in this data sheet may not be adequate for all individuals and/or situations. It is the user's obligation to evaluate and use this product safely and to comply with all applicable laws and regulations. No statement made in this data sheet shall be construed as a permission or recommendation for the use of any product in a manner that might infringe existing patents. Accordingly, no guarantee expressed or implied is made by Grand Laboratories, Inc. as to the results to be obtained based upon your use of the information, nor does Grand Laboratories, Inc. assume any liability arising out of your use of the information.