Material Safety Data Sheet

Section 1 - Chemical Product and Company Identification

Product/Chemical Name: Collagenase Santyl® Ointment

Formula: Contains 250 units of collagenase enzyme in form of a suspension per gram of white petrolatum, USP **CAS Number:** N/A

Other Designations: N/A

General Use: Enzymatic debriding agent

Manufacturer: Advance Biofactures Corporation 35 Wilbur Street, Lynbrook, NY 11563 Phone: 1 516 593-7000 Distributor: Smith & Nephew, Inc. 11775 Starkey Road Largo, FL 33773-4727 Phone: 1800 876-1261

Date Reviewed: December 8, 2003

Section 2 - Composition Information on Ingredients		
Ingredient Name	CAS Number	%wt or % Vol
White Petrolatum, USP	8009-03-8	Proprietary
Collagenase	N/A	Proprietary

Section 3 - Hazards Identification

★★★★ Emergency Overview ★★★★

Potential Health Effects

Primary Entry Routes: Ingestion, Eyes, Skin Target Organs: N/A Acute Effects Skin: None Known Eye: May cause slight irritation Ingestion: May be hazardous

Medical Conditions Aggravated by Long-Term Exposure: Avoid contact if local or systemic hypersensitivity is noticed.

Chronic Effects: No allergic sensitivity or toxic reactions have been noted in the recorded clinical investigations. However, one case of systemic manifestation of hypersensitivity to collagenase in a patient treated for more than 1 year with a combination of collagenase and cortisone has been reported.

Section 4 - First Aid Measures

Eye Contact: Flush eyes (including under lids) with copious amounts of cold water for at least 15 minutes and contact a physician. **Skin Contact:** Flush immediately with cold water and contact a physician.

Carcinogenicity: No data available

Ingestion: Contact a physician or poison control center immediately.

After first aid, get appropriate in-plant, paramedic, or community medical support. Special Precautions/Procedures: None

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Section 5 - Fire-Fighting **NFPA:** Flash Point: >390°F / >199°C Flash Point Method: ASTM D-92 Burning Rate: Not determined Autoignition Temperature: Not determined LFL (% vol in air): Not determined UFL (% vol in air): Not determined Flammability Classification: Not determined Extinguishing Media: Dry chemical, CO₂, foam, sand/earth, water fog 1 Unusual Fire or Explosion Hazards: None Hazardous Combustion Products: Upon combustion, carbon dioxide and carbon monoxide 0 are generated. Fire-Fighting Instructions: Water spray is an unsuitable extinguishing agent. Protect against smoke inhalation. Do not release runoff from fire control methods to sewers or waterways. Fire-Fighting Equipment: Self Contained Breathing Apparatus and protective clothing should be worn. Wear heat-protective, impervious gloves when handling molten product.

Section 6 - Accidental Release Measures

Spill /Leak Procedures:

Small Spills: Scrape up ointment. Clean area with an oil absorbent material. Large Spills

Containment: Not required

Cleanup: After cooling and solidification, scrape/shovel up material & then clean area with an oil absorbent material. Regulatory Requirements: Follow applicable OSHA regulations (29 CFR 1910.120).

Section 7 - Handling and Storage

Handling Precautions: None **Storage Requirements:** Store at <77°F (<25°C) Regulatory Requirements: None

Section 8 - Exposure Controls / Personal Protection

Engineering Controls: N/A

Ventilation: N/A

Administrative Controls: N/A

Respiratory Protection: N/A

Protective Clothing/Equipment: Wear proper overalls. Eye protection & gloves recommended.

Comments: Never eat, drink, or smoke in work areas. Practice good personal hygiene after using this material, especially before eating, drinking, smoking, using the toilet, or applying cosmetics.

Section 9 - Physical and Chemical Properties

Appearance and Odor: Opaque with suspended dark enzyme particles. White to off-white. No odor.

Physical State: Semi-solid Water Solubility: Nil Other Solubilities: Not determined Odor Threshold: N/A Vapor Pressure (mm Hg @ 20°C): Not determined Vapor Density (Air=1): N/A

pH @ 25° C: Not determined Boiling Point: Not determined Freezing Point: Not determined **Melting Point:** 38 – 60° C (100-140° F) Viscosity: Not determined Refractive Index: Not determined

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Formula Weight:N/A Density: Not determined Specific Gravity (H₂0=1, at 60° C): 0.815 – 0.880 Surface Tension: Not determined % (by weight) Volatile: Not determined Evaporation Rate: Not determined

Section 10 - Stability and Reactivity

Stability: Stable

Polymerization: Hazardous polymerization will not occur.

Chemical Incompatibilities: Strong oxidizing agents, excess heat, & flame.

Conditions to Avoid Temperatures $> 390^{\circ} F (199^{\circ}C)$

Hazardous Decomposition Products: Upon combustion, carbon dioxide & carbon monoxide are generated.

Section 11 - Toxicological Information

Toxicity Data:

Eye Effects: None Known Skin Effects: None Acute Inhalation Effects: None Known Acute Oral Effects: None Known Chronic Effects: None Known Carcinogenicity: None Known Mutagenicity: None Teratogenicity: None Known

Section 12 - Ecological Information

Ecotoxicity: Not determined Environmental Fate: Not determined Environmental Degradation: Not determined Soil Absorption/Mobility: Not determined

Section 13 - Disposal Considerations

Disposal: Contact your supplier or a licensed contractor for detailed recommendations. **Disposal Regulatory Requirements:** Follow applicable federal, state, and local regulations. **Container Cleaning and Disposal:** Discard in suitable trash container

Section 14 - Transport Information

DOT Transportation Data (49 CFR 172.101): Not Regulated

Section - 15 Regulatory Information

EPA Regulations: None known **OSHA Regulations:** None known **State Regulations:** May vary from state to state.

Section 16 - Other Information

Additional Hazard Rating Systems: None Known

NOTE: Information about reactivity and precautions for safe handling are provided strictly for hazard communication and are not designed to retain enzyme activity.

Note from the manufacturer: We believe the statements, technical information and recommendations contained herein are reliable, but they are given without warranty or guarantee of any kind, expressed or implied, and we assume no responsibility for any loss, damage or expense, direct or consequential, arising out of their use. Users should make their own investigations to determine the suitability of the information for their particular purpose.

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