Material Safety Data Sheet

Section 1 - Chemical Product and Company Identification

Product/Chemical Name: Acticoat* (with SILCRYST Nanocrystals)† Burn Dressing

Chemical Name: Contains: Silver / Silver Oxide / Oxygen Alloy, High Density Polyethylene, Sontara. **Chemical Family:** Metal Alloy, Ethylene homopolymers and copolymers, Polyethylene Terephthalate.

CAS Number: N/A **Other Designations:** N/A

General Use: Medical device used for infection control.

Manufacturer: Nucryst Pharmaceuticals Inc. 10102-114 Street, Ft. Saskatchewan, Alberta Canada T8L3W4

Supplier: Smith & Nephew, Inc. 970 Lake Carillon Drive Suite 110 St. Petersburg, FL 33716 Phone: 1 800 876-1261

Date Reviewed: July 10, 2009

Section 2 - Composition Information on Ingredients

Ingredient Name	CAS Number	% Weight	ACGIH TLV (2000) Consult local authorities for acceptable exposure limits.	$\mathrm{LC}_{50}/\mathrm{LD}_{50}$
Silver	7440-22-4	5	0.1 mg/m^3	Not available.
Silver Oxide	20667-12-3	5	0.1 mg/m^3	Oral LD ₅₀ Rat: 2820 mg/kg.

Section 3 - Hazards Identification

* * * * * Emergency Overview * * * * *

HMIS H 1 F 1 R 0 PPE 0

Potential Health Effects

Primary Entry Routes: Skin contact

Target Organs: N/A

Acute Effects: Temporary discoloration of affected areas or rashes and irritation in sensitized individuals.

Eye: Corneal irritation may occur as a result of mechanical abrasion. In the event of eye irritation, flush eyes with flowing

Skin: Skin irritation may result as an allergic reaction to the silver content of the dressing. Obtain medical attention in the event irritation develops or persists.

Ingestion: Ingestion of the dressing may cause a choking hazard or internal blockage. Obtain medical attention.

Chronic Effects: Excessive or chronic exposure to silver by skin contact, ingestion or inhalation may cause Argyrosis – a local or generalized discoloration of the eyes, skin and mucous membranes, where grey or blue patches of pigmentation are formed.

Section 4 - First Aid Measures

Eye Contact: Flush eyes (including under the eyelids) with copious amounts of flowing water for at least 15 minutes. Obtain medical attention

Skin Contact: Obtain medical attention in the event skin irritation develops or persists.

Ingestion: Obtain medical attention.

Inhalation: This dressing does not present an inhalation hazard.

Special Precautions/Procedures: None.

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Section 5 - Fire-Fighting

Flash Point: Not available.

Flash Point Method: Not available. Burning Rate: Not available.

Autoignition Temperature: Not available.

LEL (%vol. In air): Not available. UEL (%vol. In air): Not available.

Flammability Classification: Dressing flammability has not been determined.

Extinguishing Media: Dressing is not reactive to water or other means of extinguishment.

If involved in a fire, treat as a flammable solid.

Unusual Fire or Explosion Hazards: Not available. (Risk of explosion expected to be low.)

Hazardous Combustion Products: Not available.

Fire-Fighting Instructions: Do not release runoff from fire control methods to sewers or waterways.

Fire-Fighting Equipment: Self Contained Breathing Apparatus should be worn.

Section 6 - Accidental Release Measures

Spill or Leak Procedure: Treat used dressing as medical waste. No special spill procedures required.

Regulatory Requirements: Follow applicable OSHA regulations (29 CFR 1910.120).

Section 7 - Handling and Storage

Handling Precautions: No special handling procedures required. If used, handle as per medical waste.

Storage Requirements: Store in a cool, dry environment. Keep away from moisture. Avoid extreme heat and strong oxidizing

agents.

Regulatory Requirements: None

Section 8 - Exposure Controls / Personal Protection

Engineering Controls: None required

Handling Procedures and Equipment: No special handling procedures required. If used, handle as per medical waste.

Personal Protective Equipment: No special protection is required.

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

Physical State: Solid, 3 layers of fabric laminated together.

Odor: No odor associated with the dressing.

Volatility: Non-volatile

Vapor Pressure (mm Hg): Not applicable. Vapor Density (Air=1): Not applicable.

Formula Weight: N/A

Water/oil dist. Coeff.: Not applicable.

Specific Gravity: >1

Evaporation Rate (nBuAc = 1): Not applicable.

Appearance: Blue on top, metallic on bottom.

NFPA:

0

0

Taste: Metallic

Water Solubility: Silver coating is sparingly soluble in water.

Critical Temperature: Not available.

Boiling / CondensationPoint: Not applicable.

Melting / Sublimation Point: 120°C

Viscosity: Not applicable.

pH (1% soln/water): Not available.

Section 10 - Stability and Reactivity

Stability: Yes

Corrosivity: Non-corrosive

Chemical Incompatibilities: The silver coating is incompatible with these products: Acetylene, Acids, Amines, Ammonia,

Hydrazine, Metal Sulfides, Peroxides, Strong oxidizers.

Conditions to Avoid: Avoid extreme heat and strong oxidizing agents.

Hazardous Decomposition Products: Not available.

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Degradability: Not available.

Section 11 - Toxicological Information

Toxicological Properties:

TLV (ACGIH 2000) Not required.

Chronic effects on humans: Excessive or chronic exposure to silver by skin contact, ingestion or inhalation may cause Argyrosis - a local or generalized discoloration of the eyes, skin and mucous membranes, where grey or blue patches of pigmentation are formed.

Acute effects on humans: Temporary discoloration of affected areas or rashes and irritation in sensitized individuals.

Irritancy: Refer to acute effects on humans section in this MSDS. **Sensitization**: Some individuals may be sensitized to silver metal.

Route of entry: Skin contact.

Section 12 - Ecological Information

Ecotoxicity: Not determined

Environmental Fate: If unused, silver may be recovered by recycling.

Environmental Degradation: Not available **Soil Absorption/Mobility:** Not determined

Marine Pollutant: Not applicable

Section 13 - Disposal Considerations

Disposal: Material should be considered a medical waste after use. Dispose of according to regulations. If unused, silver may be recovered by recycling or disposed of as per to standard procedures for conventional refuse.

Disposal Regulatory Requirements: Dispose of according to applicable governmental regulations.

Section 14 - Transport Information

DOT Transportation Data: (49 CFR 172.101): Not Regulated

Air Transport (ICAO/IATA): Not regulated **Marine Transport (IMDG Code)** Not regulated.

Section - 15 Regulatory Information

EPA Regulations: None known **OSHA Regulations:** None known

State Regulations: May vary from state to state

TDG (Canada) Not regulated.

WHMIS: Not a WHMIS controlled product.

Section 16 - Other Information

Additional Hazard Rating Systems: None Known

Addition Information:

References: Fisher Scientific MSDS for Silver Oxide #20819. Dated 08/02/2000. Williams Advanced Materials MSDS for Silver, WG-0031. Dated August 2000.

DSL Silver and Silver Oxide

DSL/NDSL Record #1 Type

DSL/Confidential

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