# Material Safety Data Sheet

### **Section 1 - Chemical Product and Company Identification**

Product/Chemical Name: Acticoat\* (with SILCRYST Nanocrystals) Post-Op Dressing, Acticoat\* Surgical

Chemical Name: Contains: Silver / Silver Oxide / Oxygen Alloy

**Chemical Family:** Metal Alloy

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

General Use: Medical device used for infection control.

Manufacturer: Smith & Nephew Medical Limited Hull United Kingdom

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

**Date Reviewed:** May 8, 2012

### **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	1-5	$0.1 \text{ mg/m}^{3}$	Not available.
Silver Oxide	20667-12-3	1-5	$0.1 \text{ mg/m}^3$	Oral LD <sub>50</sub> Rat: 2820 mg/kg.
Hydrophylic Polyurethane film	n/a	90-95	n/a	n/a

#### Section 3 - Hazards Identification

★★★★ Emergency Overview ★★★★

#### **Potential Health Effects**

Η 1 F 1 R 0 PPE 0

**HMIS** 

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

water.

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 will act as a foreign body. 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**

Eve 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:** Ingestion of the dressing will act as a foreign body. Obtain medical attention.

Inhalation: This dressing does not present an inhalation hazard.

Special Precautions/Procedures: None.

### **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: Non woven fabric.

**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:** Grey/Brown.

Taste: Metallic

Water Solubility: Silver coating is sparingly soluble in water.

**NFPA:** 

0

0

Critical Temperature: Not available.

**Boiling / Condensation Point:** Not applicable. **Melting / Sublimation Point:** Not applicable.

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.

**Degradability:** Fibre will gel or dissolve in an aqueous solution containing sodium or certain ions.

## **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:** 40 CFR Part 261 **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.

Lendell Manufacturing Inc. Medisponge Hydrophilic Polyurethane Foam (1995), January 1999.

**DSL** Silver and Silver Oxide

DSL/NDSL Record #1 Type

DSL/Confidential

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