# Material Safety Data Sheet

# Section 1 - Chemical Product and Company Identification

**Product/Chemical Name:** Acticoat\* (with SILCRYST Nanocrystals)<sup>†</sup> Moisture Control Dressing

Chemical Name: Contains: Silver / Silver Oxide / Oxygen Alloy, Polyurethane foam

Chemical Family: Metal Alloy and Polyurethane

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

General Use: Medical device used for infection control.

Manufactured For: 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.	$ m LC_{50}/LD_{50}$
Silver	7440-22-4	1-5	$0.1 \text{ mg/m}^3$	Not available.
Polyurethane Foam		90-95	Not available.	Not available.
Silver Oxide	20667-12-3	1-5	$0.1 \text{ mg/m}^3$	Oral LD <sub>50</sub> 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

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**

**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.

# **Section 5 - Fire-Fighting**

**NFPA:** 

0

Flash Point: 260°C

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:** Combustion may produce toluene, carbon monoxide,

hydrogen cyanide, and nitrogen oxide.

**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:** Plastic foam

**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:** Silver/Grey.

Taste: Metallic

Water Solubility: Silver coating is sparingly soluble in water.

Critical Temperature: Not available.

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

**Melting / Sublimation Point:** 177°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: Combustion may produce toluene, carbon monoxide, hydrogen cyanide and nitrogen oxide.

Degradability: Not available.

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# **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: California Proposition 65

WARNING: This product contains a chemical known to the State of California to cause cancer:

Chromium (hexavalent (Found in trace amounts in the Silver used to formulate Acticoat Moisture Control)

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. for Medisponge Hydrophilic Polyurethane Foam (1995).

DSL Silver and Silver Oxide
DSL/NDSL Record #1 Type
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