

# 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.	LC <sub>50</sub> /LD <sub>50</sub>
Silver	7440-22-4	1-5	0.1 mg/m <sup>3</sup>	Not available.
Polyurethane Foam		90-95	Not available.	Not available.
Silver Oxide	20667-12-3	1-5	0.1 mg/m <sup>3</sup>	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

**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.

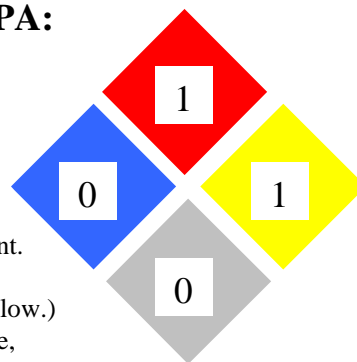
**Unusual Fire or Explosion Hazards:** Not available. (Risk of explosion expected to be low.)

**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.

**NFPA:**



## 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.

## 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.

Lendell Manufacturing Inc. for Medisponge Hydrophilic Polyurethane Foam (1995).

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

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