

Material Safety Data Sheet

Section 1 - Chemical Product and Company Identification

Product/Chemical Name: ColActive™ Collagen with Silver, Antimicrobial Dressing

Chemical Family: Collagen / Alginate and Silver Halide

CAS Number: N/A

Other Designations: N/A

General Use: Absorbent wound dressing

Manufacturer: Colvalon Technologies Ltd., 405 Britannia Rd. E., Ste. 106
Mississauga, ON L4Z 3E6 CANADA

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

Date Reviewed: August 13, 2009

Section 2 - Composition Information on Ingredients

Ingredient Name	CAS Number	% Weight
Denatured Collagen	9000-70-8	Proprietary
Sodium Alginate	9005-38-3	Proprietary
Silver Lactate	128-00-7	14
Sodium Chloride	7647-14-5	Proprietary
Sodium Hydroxide	1310-73-2	Proprietary
EDC	25952-52-8	Proprietary
NHS	6066-82-6	Proprietary

Occupational Exposure Limits: The American Conference of Governmental Industrial Hygienists (ACGIH) Threshold Limit Value for the exposure of silver particles or aerosolized soluble silver compounds is 0.01 mg/m³ of air averaged over an eight hour shift.

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: Not applicable

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

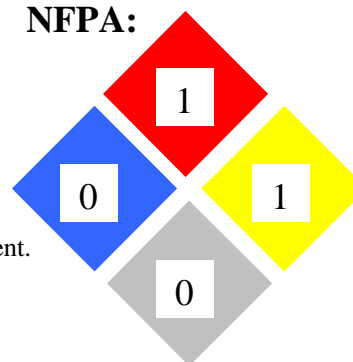
Unusual Fire or Explosion Hazards: Not available. (Low explosion risk expected)

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

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: Solid sponge-like material

Odor: Slight odor associated with the dressing

Volatility: Non-volatile

Vapor Pressure (mm Hg): Not applicable

Vapor Density (Air=1): Not applicable

Formula Weight: Not applicable

Water/oil dist. Coeff.: Not applicable

Specific Gravity: >1

Evaporation Rate (nBuAc = 1): Not applicable

Appearance: Grey / White

Taste: Not available

Water Solubility: Silver component is sparingly soluble in water

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 component is incompatible with these products: Acetylene, Acids, Amines, Ammonia, Hydrazine, Metal Sulfoxides, Peroxides, Strong oxidizers

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

Hazardous Decomposition Products: Not available

Degradability: Proteolytic enzymes will degrade material

Section 11 - Toxicological Information

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 or collagen

Route of entry: Skin contact

Mutagenicity: None known

Teratogenicity: None known

Carcinogenicity: None known

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. If unused, silver may be recovered by recycling. Dispose of according to applicable federal, state or local regulations. The state and local regulations may differ from federal regulatory requirements, and laws may change or be reinterpreted.

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

References: 1. Gaul L.E. and A.H. Staud. 1935. Clinical spectroscopy. Seventy cases of generalized argyrosis following organic and colloidal silver medication includeina a biospectrometric analysis of ten cases. J. Am. Med. Assoc. 104(16): 1387-1390.

2. The Threshold Limit Values (TLVs) and Biological Exposure Indices (BEIs) booklet issued by ACGIH, Cincinnati, OH, 1996.