

# Safety Data Sheet

## Acticoat (with SILCRYST Nanocrystals) Site Dressing

### 1. Identification

#### 1.1. Product identifier

**Product Identity** Acticoat (with SILCRYST Nanocrystals) Site Dressing  
(Acticoat is a trademark of Smith & Nephew)

**Alternate Names** Acticoat (with SILCRYST Nanocrystals) Site Dressing

#### 1.2. Relevant identified uses of the substance or mixture and uses advised against

**Intended use** Medical device used for infection control.

**Application Method** See Technical Data Sheet.

#### 1.3. Details of the supplier of the safety data sheet

**Company Name** Smith & Nephew  
970 Lake Carillon Drive, Suite 110  
St. Petersburg, FL 33716

#### Emergency

**Customer Service: Smith & Nephew** 1-800-876-1261

### 2. Hazard(s) identification

#### 2.1. Classification of the substance or mixture

Acute Tox. 4;H332 Harmful if inhaled.  
Eye Dam. 1;H318 Causes serious eye damage.  
Skin Sens. 1;H317 May cause an allergic skin reaction.  
Resp. Sens. 1;H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.  
Carc. 2;H351 Suspected of causing cancer.  
Aquatic Chronic 1;H410 Very toxic to aquatic life with long lasting effects.

#### 2.2. Label elements

Using the Toxicity Data listed in section 11 and 12 the product is labeled as follows.



**Danger**

H317 May cause an allergic skin reaction.

H318 Causes serious eye damage.

H332 Harmful if inhaled.

H334 May cause allergic or asthmatic symptoms or breathing difficulties if inhaled.

H351 Suspected of causing cancer.

H410 Very toxic to aquatic life with long lasting effects.

# Safety Data Sheet

## Acticoat (with SILCRYST Nanocrystals) Site Dressing

**[Prevention]:**

- P201 Obtain special instructions before use.
- P202 Do not handles until all safety precautions have been read and understood.
- P261 Avoid breathing dust / fume / gas / mist / vapors / spray.
- P271 Use only outdoors or in a well-ventilated area.
- P272 Contaminated work clothing should not be allowed out of the workplace.
- P273 Avoid release to the environment.
- P280 Wear protective gloves / eye protection / face protection.

**[Response]:**

- P302+352 IF ON SKIN: Wash with plenty of soap and water.
- P304+312 IF INHALED: Call a POISON CENTER or doctor / physician if you feel unwell.
- P305+351+338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do - continue rinsing.
- P308+313 IF exposed or concerned: Get medical advice / attention.
- P310 Immediately call a POISON CENTER or doctor / physician.
- P321 Specific treatment (see information on this label).
- P333+313 If skin irritation or a rash occurs: Get medical advice / attention.
- P340 Remove victim to fresh air and keep at rest in a position comfortable for breathing.
- P341 If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.
- P342+311 If experiencing respiratory symptoms: Call a POISON CENTER or doctor / physician.
- P363 Wash contaminated clothing before reuse.
- P391 Collect spillage.

**[Storage]:**

- P405 Store locked up.

**[Disposal]:**

- P501 Dispose of contents / container in accordance with local / national regulations.

### 3. Composition/information on ingredients

This product contains the following substances that present a hazard within the meaning of the relevant State and Federal Hazardous Substances regulations.

Ingredient/Chemical Designations	Weight %	GHS Classification	Notes
Urethane Prepolymer CAS Number: 0053426-99-6	10 - 25	Not Classified	[1]
Silver CAS Number: 0007440-22-4	1.0 - 10	Not Classified	[1][2]
Silver oxide CAS Number: 0020667-12-3	1.0 - 10	Ox. Sol. 1;H271 Eye Dam. 1;H318 Aquatic Acute 1;H400 Aquatic Chronic 1;H410	[1]
Polyethylene-polypropylene glycol CAS Number: 0009003-11-6	1.0 - 10	Aquatic Chronic 3;H412	[1]

# Safety Data Sheet

## Acticoat (with SILCRYST Nanocrystals) Site Dressing

<b>Toluene di-isocyanate</b> CAS Number: 0026471-62-5	0.10 - 1.0	Carc. 2;H351 Acute Tox. 2;H330 Eye Irrit. 2;H319 STOT SE 3;H335 Skin Irrit. 2;H315 Resp. Sens. 1;H334 Skin Sens. 1;H317 Aquatic Chronic 3;H412	[1]
<b>Isocyanic acid, methylenedi-4,1-cyclohexylene ester</b> CAS Number: 0005124-30-1	0.10 - 1.0	Acute Tox. 3;H331 Eye Irrit. 2;H319 STOT SE 3;H335 Skin Irrit. 2;H315 Resp. Sens. 1;H334 Skin Sens. 1;H317	[1][2]

In accordance with paragraph (i) of §1910.1200, the specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret.

[1] Substance classified with a health or environmental hazard.

[2] Substance with a workplace exposure limit.

[3] PBT-substance or vPvB-substance.

\*The full texts of the phrases are shown in Section 16.

### 4. First aid measures

#### 4.1. Description of first aid measures

<b>General</b>	In all cases of doubt, or when symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person.
<b>Inhalation</b>	This dressing does not present an inhalation hazard.
<b>Eyes</b>	Irrigate copiously with clean water for at least 15 minutes, holding the eyelids apart and seek medical attention.
<b>Skin</b>	Obtain medical attention in the event skin irritation develops or persists.
<b>Ingestion</b>	If swallowed obtain immediate medical attention. Keep at rest. Do NOT induce vomiting.

#### 4.2. Most important symptoms and effects, both acute and delayed

##### Overview

##### 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 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.

Possible cancer hazard. Contains an ingredient which may cause cancer based on animal data (See Section 3 and Section 15 for each ingredient). Risk of cancer depends on duration and level of exposure.

See section 2 for further details.

# Safety Data Sheet

## Acticoat (with SILCRYST Nanocrystals) Site Dressing

<b>Inhalation</b>	Harmful if inhaled. May cause allergy or asthma symptoms of breathing difficulties if inhaled.
<b>Eyes</b>	Causes serious eye damage.
<b>Skin</b>	May cause an allergic skin reaction.

### 5. Fire-fighting measures

#### 5.1. Extinguishing media

Dressing is not reactive to water or other means of extinguishment. If involved in a fire, treat as a flammable solid.

#### 5.2. Special hazards arising from the substance or mixture

Hazardous decomposition: No hazardous decomposition data available.

Avoid breathing dust / fume / gas / mist / vapors / spray.

#### 5.3. Advice for fire-fighters

A Self-Contained Breathing Apparatus should be worn.

Do not release runoff from fire control methods to sewers or waterways.

**ERG Guide No.**            ----

### 6. Accidental release measures

#### 6.1. Personal precautions, protective equipment and emergency procedures

Put on appropriate personal protective equipment (see section 8).

#### 6.2. Environmental precautions

Do not allow spills to enter drains or waterways.

Use good personal hygiene practices. Wash hands before eating, drinking, smoking or using toilet. Promptly remove soiled clothing and wash thoroughly before reuse.

#### 6.3. Methods and material for containment and cleaning up

Treat used dressing as medical waste. No special spill procedures required.

### 7. Handling and storage

#### 7.1. Precautions for safe handling

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

See section 2 for further details. - [Prevention]:

#### 7.2. Conditions for safe storage, including any incompatibilities

Handle containers carefully to prevent damage and spillage.

Incompatible materials: The silver coating is incompatible with these products: Acetylene, Acids, Amines, Ammonia, Hydrazine, Metal Sulfides, Peroxides, Strong oxidizers.

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

See section 2 for further details. - [Storage]:

#### 7.3. Specific end use(s)

No data available.

# Safety Data Sheet

## Acticoat (with SILCRYST Nanocrystals) Site Dressing

### 8. Exposure controls and personal protection

#### 8.1. Control parameters

##### Exposure

CAS No.	Ingredient	Source	Value
0005124-30-1	Isocyanic acid, methylenedi-4,1-cyclohexylene ester	OSHA	No Established Limit
		ACGIH	TWA: 0.005 ppm
		NIOSH	C 0.01 ppm (0.11 mg/m <sup>3</sup> )
		Supplier	No Established Limit
0007440-22-4	Silver	OSHA	TWA 0.01 mg/m <sup>3</sup>
		ACGIH	TWA: 0.01 mg/m <sup>3</sup> STEL: 0.03 mg/m <sup>3</sup>
		NIOSH	TWA 0.01 mg/m <sup>3</sup>
		Supplier	No Established Limit
0009003-11-6	Polyethylene-polypropylene glycol	OSHA	No Established Limit
		ACGIH	No Established Limit
		NIOSH	No Established Limit
		Supplier	No Established Limit
0020667-12-3	Silver oxide	OSHA	No Established Limit
		ACGIH	No Established Limit
		NIOSH	No Established Limit
		Supplier	No Established Limit
0026471-62-5	Toluene di-isocyanate	OSHA	No Established Limit
		ACGIH	No Established Limit
		NIOSH	No Established Limit
		Supplier	No Established Limit
0053426-99-6	Urethane Prepolymer	OSHA	No Established Limit
		ACGIH	No Established Limit
		NIOSH	No Established Limit
		Supplier	No Established Limit

#### Carcinogen Data

CAS No.	Ingredient	Source	Value
0005124-30-1	Isocyanic acid, methylenedi-4,1-cyclohexylene ester	OSHA	Select Carcinogen: No
		NTP	Known: No; Suspected: No
		IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No;
0007440-22-4	Silver	OSHA	Select Carcinogen: No
		NTP	Known: No; Suspected: No
		IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No;
0009003-11-6	Polyethylene-polypropylene glycol	OSHA	Select Carcinogen: No
		NTP	Known: No; Suspected: No
		IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No;
0020667-12-3	Silver oxide	OSHA	Select Carcinogen: No
		NTP	Known: No; Suspected: No

# Safety Data Sheet

## Acticoat (with SILCRYST Nanocrystals) Site Dressing

		IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No;
0026471-62-5	Toluene di-isocyanate	OSHA	Select Carcinogen: No
		NTP	Known: No; Suspected: Yes
		IARC	Group 1: No; Group 2a: No; Group 2b: Yes; Group 3: No; Group 4: No;
0053426-99-6	Urethane Prepolymer	OSHA	Select Carcinogen: No
		NTP	Known: No; Suspected: No
		IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No;

### 8.2. Exposure controls

<b>Respiratory</b>	No special protection is required.
<b>Eyes</b>	No special protection is required.
<b>Skin</b>	No special protection is required.
<b>Engineering Controls</b>	None required.
<b>Other Work Practices</b>	Use good personal hygiene practices. Wash hands before eating, drinking, smoking or using toilet. Promptly remove soiled clothing and wash thoroughly before reuse.

See section 2 for further details. - [Prevention]:

## 9. Physical and chemical properties

<b>Appearance</b>	Grey/Brown Non-woven Fabric
<b>Odor</b>	Odorless
<b>Odor threshold</b>	Not determined
<b>pH</b>	Not available
<b>Melting point / freezing point</b>	Not applicable
<b>Initial boiling point and boiling range</b>	Not applicable
<b>Flash Point</b>	Not available
<b>Evaporation rate (Ether = 1)</b>	Not applicable
<b>Flammability (solid, gas)</b>	Not Applicable
<b>Upper/lower flammability or explosive limits</b>	<b>Lower Explosive Limit:</b> Not available <b>Upper Explosive Limit:</b> Not available
<b>Vapor pressure (Pa)</b>	Not applicable
<b>Vapor Density</b>	Not applicable
<b>Specific Gravity</b>	> 1
<b>Solubility in Water</b>	Sparingly
<b>Partition coefficient n-octanol/water (Log Kow)</b>	Not Measured
<b>Auto-ignition temperature</b>	Not available
<b>Decomposition temperature</b>	Not available
<b>Viscosity (cSt)</b>	Not applicable
<b>VOC Content</b>	Not available
<b>Taste</b>	Metallic

### 9.2. Other information

No other relevant information.

# Safety Data Sheet

## Acticoat (with SILCRYST Nanocrystals) Site Dressing

### 10. Stability and reactivity

#### 10.1. Reactivity

Hazardous Polymerization will not occur.

#### 10.2. Chemical stability

Stable under normal circumstances.

#### 10.3. Possibility of hazardous reactions

Fiber will gel or dissolve in an aqueous solution containing sodium or certain ions.

#### 10.4. Conditions to avoid

Avoid extreme heat and strong oxidizing agents.

#### 10.5. Incompatible materials

The silver coating is incompatible with these products: Acetylene, Acids, Amines, Ammonia, Hydrazine, Metal Sulfides, Peroxides, Strong oxidizers.

#### 10.6. Hazardous decomposition products

No hazardous decomposition data available.

### 11. Toxicological information

#### Acute toxicity

Ingredient	Oral LD50, mg/kg	Skin LD50, mg/kg	Inhalation Vapor LC50, mg/L/4hr	Inhalation Dust/Mist LC50, mg/L/4hr	Inhalation Gas LC50, ppm
Urethane Prepolymer - (53426-99-6)	No data available	No data available	No data available	No data available	No data available
Silver - (7440-22-4)	No data available	No data available	No data available	No data available	No data available
Silver oxide - (20667-12-3)	No data available	No data available	No data available	No data available	No data available
Polyethylene-polypropylene glycol - (9003-11-6)	11,200.00, Rat - Category: NA	5,600.00, Rabbit - Category: NA	No data available	No data available	No data available
Toluene di-isocyanate - (26471-62-5)	3,360.00, Rat - Category: 5	No data available	0.35, Rat - Category: 1	No data available	13.90, Rat - Category: 1
Isocyanic acid, methylenedi-4,1-cyclohexylene ester - (5124-30-1)	9,900.00, Rat - Category: NA	10,000.00, Rabbit - Category: NA	No data available	No data available	No data available

Classification	Category	Hazard Description
Acute toxicity (oral)	---	Not Applicable
Acute toxicity (dermal)	---	Not Applicable
Acute toxicity (inhalation)	4	Harmful if inhaled.
Skin corrosion/irritation	---	Not Applicable
Serious eye damage/irritation	1	Causes serious eye damage.
Respiratory sensitization	1	May cause allergy or asthma symptoms of breathing difficulties if inhaled.

## Safety Data Sheet

### Acticoat (with SILCRYST Nanocrystals) Site Dressing

Skin sensitization	1	May cause an allergic skin reaction.
Germ cell mutagenicity	---	Not Applicable
Carcinogenicity	2	Suspected of causing cancer.
Reproductive toxicity	---	Not Applicable
STOT-single exposure	---	Not Applicable
STOT-repeated exposure	---	Not Applicable
Aspiration hazard	---	Not Applicable

## 12. Ecological information

### 12.1. Toxicity

Very toxic to aquatic life with long lasting effects.

Toxic to aquatic life

### Aquatic Ecotoxicity

Ingredient	96 hr LC50 fish, mg/l	48 hr EC50 crustacea, mg/l	ErC50 algae, mg/l
Urethane Prepolymer - (53426-99-6)	Not Available	Not Available	Not Available
Silver - (7440-22-4)	Not Available	Not Available	Not Available
Silver oxide - (20667-12-3)	Not Available	Not Available	Not Available
Polyethylene-polypropylene glycol - (9003-11-6)	Not Available	Not Available	Not Available
Toluene di-isocyanate - (26471-62-5)	133.00, Oncorhynchus mykiss	12.50, Daphnia magna	3,230.00 (96 hr), Skeletonema costatum
Isocyanic acid, methylenedi-4,1-cyclohexylene ester - (5124-30-1)	1.20, Danio rerio	Not Available	Not Available

### 12.2. Persistence and degradability

There is no data available on the preparation itself.

### 12.3. Bioaccumulative potential

Not Measured

### 12.4. Mobility in soil

No data available.

### 12.5. Results of PBT and vPvB assessment

This product contains no PBT/vPvB chemicals.

### 12.6. Other adverse effects

No data available.

## 13. Disposal considerations

### 13.1. Waste treatment methods

Observe all federal, state and local regulations when disposing of this substance.

If unused, the silver may be recovered by recycling.



# Safety Data Sheet

## Acticoat (with SILCRYST Nanocrystals) Site Dressing

### 14. Transport information

	<b>DOT (Domestic Surface Transportation)</b>	<b>IMO / IMDG (Ocean Transportation)</b>	<b>ICAO/IATA</b>
<b>14.1. UN number</b>	Not Applicable	Not Regulated	Not Regulated
<b>14.2. UN proper shipping name</b>	Not Regulated	Not Regulated	Not Regulated
<b>14.3. Transport hazard class(es)</b>	<b>DOT Hazard Class:</b> Not Applicable	<b>IMDG:</b> Not Applicable <b>Sub Class:</b> Not Applicable	<b>Air Class:</b> Not Applicable
<b>14.4. Packing group</b>	Not Applicable	Not Applicable	Not Applicable
<b>14.5. Environmental hazards</b>			
<b>IMDG</b>	Marine Pollutant: Yes ( Silver oxide )		
<b>14.6. Special precautions for user</b>			
	No further information		

### 15. Regulatory information

<b>Regulatory Overview</b>	The regulatory data in Section 15 is not intended to be all-inclusive, only selected regulations are represented.
<b>Toxic Substance Control Act ( TSCA)</b>	All components of this material are either listed or exempt from listing on the TSCA Inventory.
<b>WHMIS Classification</b>	D2A E
<b>US EPA Tier II Hazards</b>	<p style="text-align: right;"><b>Fire:</b> No</p> <p style="text-align: right;"><b>Sudden Release of Pressure:</b> No</p> <p style="text-align: right;"><b>Reactive:</b> No</p> <p style="text-align: right;"><b>Immediate (Acute):</b> Yes</p> <p style="text-align: right;"><b>Delayed (Chronic):</b> Yes</p>
<b>EPCRA 311/312 Chemicals and RQs (lbs):</b>	
	Silver ( 1,000.00)

**EPCRA 302 Extremely Hazardous:**

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

**EPCRA 313 Toxic Chemicals:**

Isocyanic acid, methylenedi-4,1-cyclohexylene ester  
 Silver  
 Silver oxide  
 Toluene di-isocyanate

# Safety Data Sheet

## Acticoat (with SILCRYST Nanocrystals) Site Dressing

### Proposition 65 - Carcinogens (>0.0%):

Chromium (VI)

Toluene di-isocyanate

### Proposition 65 - Developmental Toxins (>0.0%):

Chromium (VI)

### Proposition 65 - Female Repro Toxins (>0.0%):

Chromium (VI)

### Proposition 65 - Male Repro Toxins (>0.0%):

Chromium (VI)

### New Jersey RTK Substances (>1%):

Silver

### Pennsylvania RTK Substances (>1%):

Silver

## 16. Other information

The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind, expressed or implied, is made with respect to the information contained herein. We accept no responsibility and disclaim all liability for any harmful effects which may be caused by exposure to our products. Customers/users of this product must comply with all applicable health and safety laws, regulations, and orders.

The full text of the phrases appearing in section 3 is:

H271 May cause fire or explosion; strong oxidizer.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H318 Causes serious eye damage.

H319 Causes serious eye irritation.

H330 Fatal if inhaled.

H331 Toxic if inhaled.

H334 May cause allergic or asthmatic symptoms or breathing difficulties if inhaled.

H335 May cause respiratory irritation.

H351 Suspected of causing cancer.

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

H412 Harmful to aquatic life with long lasting effects.

Not Classified

**This is the first version in the GHS SDS format. Listings of changes from previous versions in other formats are not applicable.**

End of Document

**Safety Data Sheet**  
**Acticoat (with SILCRYST Nanocrystals) Site Dressing**