

# Material Safety Data Sheet

IDENTITY (As Used on Label and List) <b>Selan Antifungal</b>	
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## Section I

Manufacturer/Distributor's Name <b>Span-America</b>	Emergency Telephone Number <b>(800) 888-6752</b>
Address (Number, Street, City, State, and ZIP Code) <b>70 Commerce Center</b>	Telephone Number for Information <b>(864) 288-6752</b>
<b>Greenville, SC 29615</b>	Date Prepared: 01/26/04

## Section II - Hazard Ingredients/Identity Information

Hazardous Components (Specific Chemical Identity; Common Name(s))	CAS #	OSHA PEL	ACGIH TLV	STEL	HAZARDOUS
Chemical Name	Trade/Common				
Blend of fatty alcohol and ethoxylated sorbitan ester	Polawax	N/A	N/A	N/A	None Found
Glycol	PGUSPRV Propylene Glycol – USP RV	57-55-6	N/A	N/A	N/A
TBF 9 – (5 to 600M)	Dimethylpolysiloxane	N/A	N/A	N/A	None Found
1H-imidazole, 1-{(2,4-dichlorophenyl)-2}[(2,4-dichlorophenyl) methoxy] ethyl}- mononitrate	Miconazole Nitrate	22832-87-7	N/A	N/A	N/A
Zinc Oxide Powder	Zinc White, Chinese White	1314-13-2	N/A	10mg/M3	N/A

## Section III - Physical/Chemical Characteristics

### NFPA/HMIS Ratings

Trade/Common Name	Health	Flammability	Reactivity	Special/Other
Polawax	0	0	0	PPE Code B
Propylene Glycol	0	1	0	
Dimethylpolysiloxane	0	0	0	
Miconazole Nitrate				
Zinc Oxide	1	0	0	PPE Code E

### Polarwax

Boiling Point	Not Available	Specific Gravity (H <sub>2</sub> O = 1)	N/A
Vapor Pressure (mm Hg.)	Not Available	Melting Point	50-54° C
Vapor Density (AIR = 1)	Not Available	Evaporation Rate (Butyl Acetate = 1)	N/A
Solubility in Water	Emulsifiable	pH	5.5 – 7.0 (3% in water)
Appearance/Physical State	Creamy white, waxy solid	Odor	Mild characteristic

### Propylene Glycol

Boiling Point	187.2° C (369°F)	Specific Gravity (H <sub>2</sub> O = 1)	1.0381
Vapor Pressure (mm Hg.)	<1 mm Hg @ 25° C (77° F)	Melting/Freezing Point	< - 60° C (< - 76° F)
Vapor Density (AIR = 1)	5.2	Evaporation Rate (Butyl Acetate = 1)	<1
Solubility in Water	Slight (0.1-1%)	pH	6
Appearance/Physical State	Colorless mobile liquid	Odor	Mild Odor

### Dimethylpolysiloxane

Boiling Point	N/A	Specific Gravity (H <sub>2</sub> O = 1)	.97
Vapor Pressure (mm Hg.)	NEG	Melting/Freezing Point	N/A
Vapor Density (AIR = 1)	N/A	Evaporation Rate (Butyl Acetate = 1)	<1
Solubility in Water	Insoluble	Acid/Alkalinity (MEQ/G)	7
Appearance /Physical State	Clear liquid	Odor	None
% Volatile by Weight	<1	Density (Kg/M3)	958.5

### Miconazole Nitrate

Boiling Point	N/A	Specific Gravity (H <sub>2</sub> O = 1)	N/A
Vapor Pressure (mm Hg.)	N/A	Melting/Freezing Point	N/A
Vapor Density (AIR = 1)	N/A	Evaporation Rate (Butyl Acetate = 1)	N/A
Solubility in Water	Very Slightly Soluble	Acid/Alkalinity (MEQ/G)	N/A
Appearance /Physical State	White or practically white crystalline or powder	Odor	Slight
% Volatile by Weight	N/A	Density (Kg/M3)	N/A

### Zinc Oxide

Boiling Point	N/A	Specific Gravity (H <sub>2</sub> O = 1)	5.61
Vapor Pressure (mm Hg.)	Sublimes @ 1975° C	Melting/Freezing Point	N/A
Vapor Density (AIR = 1)	N/A	Evaporation Rate (Butyl Acetate = 1)	N/A
Solubility in Water	0.00016g/100ml cold water; soluble in acids and bases	Acid/Alkalinity (MEQ/G)	N/A
Appearance /Physical State	Fine white powder	Odor	None
% Volatile by Weight	N/A	Molecular Weight	81.38

## Section IV - Fire and Explosion Hazard Data

### Polarwax

Flash Point (Method Used) Closed Cup Method: <b>Not Established</b>	Flammable Limits	LEL N/A	UEL N/A
Extinguishing Media: <b>Dry Chemical, foam, carbon dioxide, water spray</b>			
Special Fire Fighting Procedures: <b>Wear self-contained breathing apparatus and other protective clothing</b>			
Unusual Fire and Explosion Hazards <b>NONE</b>			

### Propylene Glycol

Flash Point (Method Used) Closed Cup Method <b>100° C (212° F)</b>	Flammable Limits	LEL <b>2.6</b>	UEL <b>12.5</b>
Extinguishing Media: <b>Use water spray, dry chemical, foam, or carbon dioxide. Use water spray to cool fire-exposed containers. Water or foam may cause frothing</b>			
Special Fire Fighting Procedures <b>No special equipment or procedures required</b>			
Unusual Fire and Explosion Hazards: <b>None</b>			
Ignition Temperature: <b>371.1° C (700° F)</b>			

### Dimethylpolysiloxane

Flash Point (Method Used) <b>&gt;204° C &gt;400° F</b>	Flammable Limits	LEL N/A	UEL N/A
Extinguishing Media: <b>All standard firefighting media</b>			
Special Fire Fighting Procedures: <b>None Known</b>			
Sensitivity to mechanical Impact: <b>No</b>			
Unusual Fire and Explosion Hazards: <b>None Known</b>			
Sensitivity to static discharge: <b>Sensitivity to static discharge is not expected</b>			

## Miconazole Nitrate

Flash Point (Method Used) N/A	Flammable Limits	LEL N/A	UEL N/A
Extinguishing Media: <b>Water spray, dry chemical, carbon dioxide or foam as appropriate for surrounding fire and materials</b>			
Special Fire Fighting Procedures: <b>As with all fires, evacuate personnel to safe area. Firefighters should use self-contained breathing equipment and protective clothing</b>			
Auto-ignition temperature: <b>350°C</b>			
Unusual Fire and Explosion Hazards: <b>This material is assumed to be combustible. As with all dry powders it is advisable to ground mechanical equipment in contact with dry material to dissipate the potential buildup of static electricity. When heated to decomposition material emits toxic of NO and CI fumes. Emits toxic fumes under fire conditions.</b>			

## Zinc Oxide

Flash Point (Method Used) N/A	Flammable Limits	LEL N/A	UEL N/A
Extinguishing Media: <b>None – Material will not burn</b>			
Special Fire Fighting Procedures: <b>None Known</b>			
Auto-ignition temperature: <b>N/A</b>			
Unusual Fire and Explosion Hazards: <b>None known</b>			

## Section V – Stability and Reactivity Data

### Polarwax

Stability	<b>Stable</b>	Conditions to Avoid: <b>None Known</b>
Incompatibility ( <i>Materials to Avoid</i> )	<b>Strong oxidizing agents</b>	
Hazardous Decomposition or Byproducts	<b>Oxides of carbon</b>	
Hazardous Polymerization	<b>Will Not Occur</b>	Conditions to Avoid: <b>None Known</b>

### Propylene Glycol

Stability	<b>Stable</b>	Conditions to Avoid: <b>None Known</b>
Incompatibility ( <i>Materials to Avoid</i> )	<b>None Known</b>	
Hazardous Decomposition or Byproducts – heat/combustion		Toxic levels of carbon monoxide, carbon dioxide, irritating aldehydes and ketones
Hazardous Polymerization	<b>Will Not Occur</b>	Conditions to Avoid: <b>None Known</b>

### Dimethylpolysiloxane

Stability	<b>Stable</b>	Conditions to Avoid: <b>None Known</b>
Incompatibility ( <i>Materials to Avoid</i> )	<b>None Known</b>	
Hazardous Decomposition or Byproducts – heat/combustion		Carbon monoxide, carbon dioxide, formaldehyde
Hazardous Polymerization	<b>Will Not Occur</b>	Conditions to Avoid: <b>None Known</b>

### Miconazole Nitrate

Stability	<b>Stable</b>	Conditions to Avoid: <b>Material is stable from a safety point of view – avoid exposure to light</b>
Incompatibility ( <i>Materials to Avoid</i> )	<b>None Known</b>	
Hazardous Decomposition or Byproducts – heat/combustion		Material emits toxic fumes of NO <sub>x</sub> and Cl. Emits toxic fumes under fire conditions
Hazardous Polymerization	<b>Will Not Occur</b>	Conditions to Avoid: <b>None Known</b>

## Zinc Oxide

Stability	<b>Stable</b>	Conditions to Avoid: <b>None Known</b>
Incompatibility ( <i>Materials to Avoid</i> )	<b>Intimate mixtures with chlorinated rubber above 216° C</b>	
Hazardous Decomposition or Byproducts – heat/combustion	<b>None Known</b>	
Hazardous Polymerization	<b>Will Not Occur</b>	Conditions to Avoid: <b>None Known</b>

## Section VI - Health Hazard Data

### Polarwax

Route(s) of Entry:	Inhalation?	Skin?		Ingestion?	
Health Hazards ( <i>Acute and Chronic</i> )	<b>None determined</b>			<b>None determined</b>	
Carcinogenicity:	<b>Non-carcinogenic</b>	IARC Monographs?	<b>No</b>	OSHA Regulated?	<b>No</b>
Signs and Symptoms of Exposure	<b>None determined</b>				
Medical Conditions Generally Aggravated by Exposure	<b>None determined</b>				
Emergency and First Aid Procedures					
Skin	<b>Wash with soap and water</b>				
Eyes	<b>Flush with water for at least 15 minutes. If irritation develops, get medical attention</b>				
Ingested	<b>Get medical attention</b>				

### Propylene Glycol

Route(s) of Entry:	Inhalation?	Skin/Eyes?		Ingestion?	
Health Hazards ( <i>Acute and Chronic</i> )	<b>Practically non-toxic</b>	<b>Practically non-toxic</b>		<b>Practically non-toxic</b>	
Carcinogenicity:	<b>Non-carcinogenic</b>	IARC Monographs?	<b>No</b>	OSHA Regulated?	<b>No</b>
Signs and Symptoms of Exposure	<b>None determined</b>				
Medical Conditions Generally Aggravated by Overexposure	<b>Vapors or mist in excess of permissible concentrations or in usually high concentrations generated from spraying, heating the material or as from exposure in poorly ventilated areas or confined spaces may cause irritation of the nose, throat, headache, nausea, and drowsiness</b>	<b>Brief contact is not irritating. Prolonged contact as with clothing wetted with material may cause defatting or skin or irritation</b>		<b>If more than several mouthfuls are swallowed, abdominal discomfort, nausea, and diarrhea may occur. Aspiration may occur during swallowing or vomiting resulting in lung damage.</b>	
Emergency and First Aid Procedures					
Skin	<b>Wash with soap and water. Get medical attention if skin irritation develops</b>				
Eyes	<b>Flush with water for at least 15 minutes. If irritation develops, get medical attention</b>				
Ingested	<b>If person is conscious and can swallow, give two glasses of water (16 oz.) but do not induce vomiting. If vomiting occurs, give fluids again. Get medical attention</b>				
Inhalation	<b>If irritation, headache, nausea, or drowsiness occurs, remove to fresh air. Get medical attention if breathing becomes difficult.</b>				

## Dimethylpolysiloxane

Route(s) of Entry:	Inhalation?	Skin/Eyes?	Ingestion?
Health Hazards ( <i>Acute and Chronic</i> )	<b>None determined</b>	<b>Skin - None determined Eyes – May cause mild eye irritation</b>	<b>None determined</b>
Carcinogenicity:	<b>Non-carcinogenic</b>	IARC Monographs? <b>No</b>	OSHA Regulated? <b>No</b>
Signs and Symptoms of Exposure	<b>None determined</b>	<b>None determined</b>	<b>None determined</b>
Medical Conditions Generally Aggravated by Exposure	<b>None determined</b>	<b>None determined</b>	<b>None determined</b>
Emergency and First Aid Procedures			
Skin	<b>Wash with soap and water</b>		
Eyes	<b>Flush with water for at least 15 minutes. If irritation develops, get medical attention</b>		
Ingested	<b>None Known</b>		
Inhalation	<b>None Known</b>		
Other	<b>Attention: Not for injection into humans. This product contains Methylpolysiloxanes, which can generate Formaldehyde at approximately 300° F (150° C) and above. In atmospheres which contain oxygen.</b>		

## Miconazole Nitrate

Route(s) of Entry:	Inhalation?	Skin/Eyes?	Ingestion?
Health Hazards ( <i>Acute and Chronic</i> )	<b>Possible allergic reaction</b>	<b>Possible mild irritation to mucous membranes</b>	<b>Adverse effects include vomiting, diarrhea, convulsions and heart rhythm disorders</b>
Carcinogenicity:	<b>Non-carcinogenic</b>	IARC Monographs? <b>No</b>	OSHA Regulated? <b>No</b>
Signs and Symptoms of Exposure	<b>None determined</b>		
Medical Conditions Generally Aggravated by Exposure	<b>Hypersensitivity to the material</b>	<b>Hypersensitivity to the material</b>	<b>Hypersensitivity to the material</b>
Emergency and First Aid Procedures			
Skin	<b>There is little absorption through the skin or mucous membranes when Miconazole Nitrate is applied topically, however, it has caused contact dermatitis. Flush with copious amounts of water.</b>		
Eyes	<b>Flush with water for at least 15 minutes. If irritation develops, get medical attention</b>		
Ingested	<b>May cause irritation. Flush out mouth with water.</b>		
Inhalation	<b>May cause irritation of respiratory tract. Remove to fresh air</b>		

## Zinc Oxide

Route(s) of Entry:	Inhalation?	Skin/Eyes?	Ingestion?
Health Hazards ( <i>Acute and Chronic</i> )	<b>Dust can cause irritation of the nose, throat, and upper respiratory tract: Coughing and choking</b>	<b>Dust may irritate or dry the skin Dust may cause eye irritation</b>	<b>Non-toxic. Although ingestion is unlikely, it can result in consequent pain, nausea, vomiting, thirst and diarrhea</b>
Carcinogenicity:	<b>Non-carcinogenic</b>	IARC Monographs? <b>No</b>	OSHA Regulated? <b>No</b>
Signs and Symptoms of Overexposure	<b>Chills, mild fever and aching muscles and joints lasting 24 hours or less</b>		
Medical Conditions Generally Aggravated by Exposure	<b>Hypersensitivity to the material</b>	<b>Hypersensitivity to the material</b>	<b>Hypersensitivity to the material</b>
Emergency and First Aid Procedures			
Skin	<b>Wash with soap and water</b>		

Eyes	<b>Flush with water for at least 15 minutes. If irritation develops, get medical attention</b>
Ingested	<b>None Known</b>
Inhalation	<b>Remove to fresh air. If breathing difficult, assist breathing and seek medical attention</b>

## Section VII - Precautions for Safe Handling and Use

### Polarwax

Steps to Be Taken in Case Material is Released or Spilled	
<b>Clean up with inert absorbent material and place into a separate waste container. Flush area with warm water</b>	
Waste Disposal Method	<b>None Listed</b>
Precautions to Be taken in Handling and Storing	<b>To optimize product integrity and quality, store under cool, dry conditions</b>
Other Precautions: <b>None</b>	

### Propylene Glycol

Steps to Be Taken in Case Material is Released or Spilled	
<b>Contain spill if possible, contain with absorbent materials such as clay or soil, and shovel up. Avoid skin and eye contact.</b>	
Waste Disposal Method	<b>This product has been evaluated for RCRA characteristics and does not meet the criteria of a hazardous waste if discarded in its purchased form.</b>
Precautions to Be taken in Handling and Storing	<b>Handling: Minimum feasible handling temperatures should be maintained. Storage: Periods of exposure to high temperatures should be minimized. Water contamination should be avoided</b>
Other Precautions: <b>None</b>	

### Dimethylpolysiloxane

Steps to Be Taken in Case Material is Released or Spilled	
<b>Wipe, scrap or soak up in an inert material and put in a container for disposal. Wash walking surfaces with detergent and water to reduce slipping hazard.</b>	
Waste Disposal Method	<b>Should be made in accordance with federal, state, and local regulations. Incineration recommended in approved incinerator according to state, federal, and local regulations.</b>
Precautions to Be taken in Handling and Storing	<b>Handling: Minimum feasible handling temperatures should be maintained. Storage: Periods of exposure to high temperatures should be minimized. Water contamination should be avoided</b>
Other Precautions: <b>None</b>	

### Miconazole Nitrate

Steps to Be Taken in Case Material is Released or Spilled	
<b>Wear approved respirator and chemically compatible gloves. Vacuum or sweep up spillage. Avoid dust. Place spillage in appropriate container for waste disposal. Wash contaminated clothing before reuse. Ventilate area and wash spill site.</b>	
Waste Disposal Method	<b>Should be made in accordance with federal, state, and local regulations.</b>
Precautions to Be taken in Handling and Storing	<b>Store in light resistant container. This material should be handled and stored per label and other instructions to ensure product integrity</b>
Other Precautions: <b>Avoid contact with eyes, skin or clothing. Avoid breathing dust or mist. Use with adequate dust control. Wash thoroughly after handling. Wear fresh clothing daily. Wash contaminated clothing before reuse. Do not permit drinking or smoking near material.</b>	

## Zinc Oxide

Steps to Be Taken in Case Material is Released or Spilled	
<b>Sweep or vacuum spills into a container. Spilled areas may be washed with water but do NOT wash into sewer.</b>	
Waste Disposal Method	<b>Waste zinc oxide should be handled in a manner which complies with local, state and federal regulations</b>
Precautions to Be taken in Handling and Storing	<b>Store in a dry area</b>
Other Precautions: <b>None</b>	

## Section VIII - Control Measures

### Polarwax

Respiratory Protection ( <i>Specify Type</i> )	<b>Not required</b>	
Ventilation	<b>Normal ventilation adequate</b>	Special: <b>None</b>
	Mechanical ( <i>General</i> )	Other
Protective Gloves: <b>Wear Impervious Gloves</b>	Eye Protection: <b>Use OSHA approved safety glasses</b>	
Other Protective Clothing or Equipment: <b>None</b>		
Work/Hygienic Practices: <b>Follow Good Manufacturing Practices</b>		

### Propylene Glycol

Respiratory Protection ( <i>Specify Type</i> )	<b>Not required</b>	
Ventilation	<b>Local exhaust ventilation recommended if generating vapor, dust, or mist.</b>	Special: <b>None</b>
	Mechanical ( <i>General</i> )	Other
Protective Gloves: <b>None listed</b>	Eye Protection: <b>Safety glasses, chemical type goggles or face shield recommended to prevent eye contact</b>	
Other Protective Clothing or Equipment: <b>None</b>		
Work/Hygienic Practices: <b>Workers should wash exposed skin several times daily with soap and water. Soiled work clothing should be washed or dry cleaned</b>		

### Dimethylpolysiloxane

Respiratory Protection ( <i>Specify Type</i> )	<b>Not required</b>	
Ventilation	<b>None Known</b>	Special: <b>None</b>
	Mechanical ( <i>General</i> ): <b>None Known</b>	Other: <b>None Known</b>
Protective Gloves: <b>None listed</b>	Eye Protection: <b>Safety glasses</b>	
Other Protective Clothing or Equipment: <b>None</b>		
Work/Hygienic Practices: <b>Follow Good Manufacturing Practices</b>		

### Miconazole Nitrate

Respiratory Protection ( <i>Specify Type</i> )	<b>NIOSH approved respirator</b>	
Ventilation	<b>Adequate</b>	Special: <b>None</b>
	Mechanical ( <i>General</i> ): <b>None Known</b>	Other: <b>None Known</b>
Protective Gloves: <b>Rubber</b>	Eye Protection: <b>Safety goggles</b>	
Other Protective Clothing or Equipment: <b>Appropriate laboratory apparel, protect exposed skin</b>		
Work/Hygienic Practices: <b>Follow Good Manufacturing Practices</b>		

### Zinc Oxide

Respiratory Protection ( <i>Specify Type</i> )	<b>Wear OSHA approved dust mask or respirator</b>	
Ventilation	<b>Provide sufficient local ventilation if TLV likely to be exceeded</b>	Special: <b>None</b>
	Mechanical ( <i>General</i> ): <b>None Known</b>	Other: <b>None Known</b>
Protective Gloves: <b>Gloves recommended or use barrier cream</b>	Eye Protection: <b>Safety goggles</b>	
Other Protective Clothing or Equipment: <b>Full protective clothing is recommended for bulk dust handling</b>		
Work/Hygienic Practices: <b>Follow Good Manufacturing Practices</b>		

### **DISCLAIMER**

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