

## **SAFETY DATA SHEETS**

**This SDS packet was issued with item:**

078359024

**The safety data sheets (SDS) in this packet apply to the individual products listed below. Please refer to invoice for specific item number(s).**

078916289

**The safety data sheets (SDS) in this packet apply to one or more components included in the items listed below. Items listed below may require one or more SDS. Please refer to invoice for specific item number(s).**

078340611 078340629 078359016



**Material Safety Data Sheet**  
ISO/DIS 11014 / 29 CFR 1910.1200 / ANSI Z400.1

Printing date 06/05/2000

Reviewed on 06/05/2000

**1 Identification of substance**

- Product details
- Trade name: Thiabendazole  
TRESADERM
- Product number: 55871
- Manufacturer/Supplier:  
Merial Limited  
2100 Ronson Road  
Iselin, NJ 08830-3077  
1-888-MERIAL 1 (1-888-637-4251), Option 5
- Emergency information:  
Spill Information: CHEMTREC® 1-800-424-9300  
CHEMTREC® International 1+703-527-3887  
Reverse charges.  
Health Information: 1-888-637-4251, Option 5

**2 Composition/Data on components**

- Chemical characterization
- Description: Mixture of the substances listed below.

**Components:**

6303-21-5 phosphinic acid C; R 34	40.0 %
64-17-5 ethanol F; R 11	11.0 %
148-79-8 Thiabendazole	4.0 %
1405-10-3 Neomycin, sulfate (salt) Xn; R 21/22	0.4 %
50-02-2 Dexamethasone	0.11 %
56-81-5 glycerol	~ %
Non hazardous inert ingredients	~ %

**3 Hazards identification**

- Hazard description:



C Corrosive

- Information pertaining to particular dangers for man and environment:  
R 10 Flammable.  
R 34 Causes burns.
- Classification system:  
The classification was made according to the latest editions of

USA

**Material Safety Data Sheet**  
 ISO/DIS 11014 / 29 CFR 1910.1200 / ANSI Z400.1

Printing date 06/05/2000

Reviewed on 06/05/2000

**Trade name: Thiabendazole**  
**TRESADERM**

international substances lists, and from company and regulatory data.

- **NFPA ratings (scale 0 - 4)**



Health = 0  
 Fire = 1  
 Reactivity = 0

- **HMIS-ratings (scale 0 - 4)**



#### **4 First aid measures**

- **General information:**  
Immediately remove any clothing soiled by the product.
- **After inhalation:** Not an expected route of entry.
- **After skin contact:**  
No skin irritation is expected with this formulation.  
If skin irritation occurs, consult a doctor.
- **After eye contact:**  
Rinse opened eye for several minutes under running water. Then consult a doctor.
- **After swallowing:**  
Rinse out mouth and then drink plenty of water.  
Seek medical advice.

#### **5 Fire fighting measures**

- **Suitable extinguishing agents:**  
Use water spray or all purpose dry chemical.
- **Special hazards caused by the material, its products of combustion or resulting gases:**  
This material is NOT combustible under DOT/IATA/ICAO combustibility tests. If involved in fire, toxic gases including CO, CO<sub>2</sub>, phosphorous, fluorine, sulfur and nitrogen compounds may be generated.
- **Protective equipment:**  
Fire fighters should wear self-contained breathing apparatus and full protective equipment.

#### **6 Accidental release measures**

- **Person-related safety precautions:** Not required.
- **Measures for environmental protection:**  
Do not allow product to reach sewage system or any water course.
- **Measures for cleaning/collecting:**  
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).  
Use neutralizing agent.  
Dispose contaminated material as waste according to section XIII.  
Ensure adequate ventilation.

#### **7 Handling and storage**

- **Handling:**

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**Trade name: Thiabendazole**  
**TRESADERM**

- **Information for safe handling:**  
 Store in cool, dry place in tightly closed containers.  
 Handle with care. Avoid jolting and impact.  
 Use only in well ventilated areas.
- **Information about protection against explosions and fires:**  
 Keep ignition sources away - Do not smoke.  
 Protect against electrostatic charges.
- **Storage:**
- **Requirements to be met by storerooms and receptacles:**  
 Store only in the original container.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:**  
 Keep receptacle tightly sealed.  
 Store in a cool, dry, well ventilated place.
- **Recommended storage temperature:** 2.5°C-7.5°C

## 8 Exposure controls and personal protection

### Components with limit values that require monitoring at the workplace:

64-17-5 ethanol

ACGIH TLV: 1000 ppm

A4

NIOSH REL: 1900 mg/m<sup>3</sup>, 1000 ppmOSHA PEL: 1900 mg/m<sup>3</sup>, 1000 ppmMAK (Germany): 1900 mg/m<sup>3</sup>, 1000 ppm  
(DFG)

- **Personal protective equipment:**
- **General protective and hygienic measures:**  
 Keep away from foodstuffs, beverages.  
 Immediately remove all soiled and contaminated clothing.  
 Wash hands before breaks and at the end of work.  
 Avoid contact with the eyes and skin.  
 Do not eat, drink, smoke or inhale.  
 Do not store food in the working area.
- **Protection of hands:**



Rubber or other impervious gloves

- **Eye protection:** Not required under normal conditions of use.

## 9 Physical and chemical properties

- **Form:** Liquid
- **Color:** Light amber colored
- **Odor:** Not established

	<u>Value/Range</u>	<u>Unit</u>	<u>Method</u>
• <b>Change in condition</b>			
• <b>Melting point/Melting range:</b>	Undetermined.		
• <b>Boiling point/Boiling range:</b>	104	° C	
• <b>Flash point:</b>	37	° C	
• <b>Ignition temperature:</b>	425.0	° C	

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**Trade name: Thiabendazole**  
**TRESADERM**

- **Auto igniting:** Product is not self-igniting.
- **Danger of explosion:** Product is not explosive. However, formation of explosive air/vapor mixtures are possible.
- **Explosion limits:**
- **Lower:** 3.5 Vol %
- **Upper:** 15.0 Vol %
- **Vapor pressure:** at 20 ° C 59.0 hPa
- **Specific gravity:** 1.10-1.11
- **Solubility in / Miscibility with**
- **Water:** Not miscible or difficult to mix.
- **pH-value:** 1.8-2.8
- **Solvent content:**
- **Organic solvents:** 11.0 %

**10 Stability and reactivity**

- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Dangerous reactions** No dangerous reactions known.
- **Dangerous products of decomposition:** No dangerous decomposition products known.

**11 Toxicological information**

- **Acute toxicity:**  
**LD/LC50 values that are relevant for classification:**  
 64-17-5 ethanol  
 Oral: LD50: 7060 mg/kg (rat)  
 Inhalative: LC50/4 h: 20000 mg/l (rat)  
 50-02-2 Dexamethasone  
 Oral: LD50: 800 mg/kg (mouse)
- **Primary irritant effect:**
- **on the skin:** No irritating effect known.
- **on the eye:** Irritating effect.
- **Sensitization:** No sensitizing effects known.
- **Additional toxicological information:**  
 The product shows the following dangers according to internally approved calculation methods for preparations:  
 Corrosive.  
 Swallowing will lead to a strong caustic effect on mouth and throat and to the danger of perforation of esophagus and stomach.

**12 Ecological information**

- **Ecotoxological effects:**  
**Acquatic toxicity:**  
 148-79-8 Thiabendazole

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<b>Trade name: Thiabendazole</b> <b>TRESADERM</b>
LC50/8 days: 0.45 ppm (daphnia magna) • <b>General notes:</b> Must not reach bodies of water or drainage ditch undiluted or unneutralized.
<b>13 Disposal considerations</b> • <b>Product:</b> • <b>Recommendation:</b> Incinerate at an EPA approved incinerator facility. • <b>Uncleaned packagings:</b> • <b>Recommendation:</b> Disposal must be made according to official regulations.
<b>14 Transport information</b> • <b>DOT regulations:</b> • <b>Hazard class:</b> - • <b>Land transport ADR/RID (cross-border):</b> • <b>ADR/RID class:</b> - • <b>Maritime transport IMDG:</b> • <b>IMDG Class:</b> - • <b>Marine pollutant:</b> No • <b>Air transport ICAO-TI and IATA-DGR:</b> • <b>ICAO/IATA Class:</b> -
<b>15 Regulations</b> • <b>Sara</b> <u><b>Section 355 (extremely hazardous substances):</b></u> None of the ingredients are listed. <u><b>Section 313 (Specific toxic chemical listings):</b></u> 148-79-8 Thiabendazole <u><b>TSCA (Toxic Substances Control Act):</b></u> 6303-21-5 phosphinic acid 64-17-5 ethanol 1405-10-3 Neomycin, sulfate (salt) • <b>CA Proposition 65</b> <u><b>Chemicals known to cause cancer:</b></u> None of the ingredients are listed. <u><b>Chemicals known to cause reproductive toxicity:</b></u> 1405-10-3 Neomycin, sulfate (salt) • <b>Product related hazard informations:</b> The product has been classified and marked in accordance with directives on hazardous materials. • <b>Hazard symbols:</b> C Corrosive • <b>Hazard-determining components of labelling:</b> phosphinic acid • <b>Risk phrases:</b> 10 Flammable. 34 Causes burns.

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**TRESADERM**

• **Safety phrases:**

- 1/2      Keep locked up and out of the reach of children.
- 7        Keep container tightly closed.
- 16       Keep away from sources of ignition - No smoking.
- 20       When using do not eat or drink.
- 25       Avoid contact with eyes.
- 26       In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
- 27/28   After contact with skin, take off immediately all contaminated clothing, and wash immediately with plenty of water.
- 29/56   Do not empty into drains, dispose of this material and its container at hazardous or special waste collection point
- 36/37/39 Wear suitable protective clothing, gloves and eye/face protection.
- 45       In case of accident or if you feel unwell, seek medical advice immediately.
- 64       If swallowed, rinse mouth with water (only if the person is conscious)

**16 Other information**

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- **Contact:** MSDS Coordinator, 706-552-2739, msds@merial.com

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**TRESADERM**
- Product number: 55871
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Merial Limited  
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Iselin, NJ 08830-3077  
1-888-MERIAL 1 (1-888-637-4251), Option 5
- Emergency information:  
Spill Information: CHEMTREC® 1-800-424-9300  
CHEMTREC® International 1+703-527-3887  
Reverse charges.  
Health Information: 1-888-637-4251, Option 5

**2 Composition/Data on components**

- Chemical characterization
- Description: Mixture of the substances listed below.

**Components:**

6303-21-5 phosphinic acid C; R 34	40.0 %
64-17-5 ethanol F; R 11	11.0 %
148-79-8 Thiabendazole	4.0 %
1405-10-3 Neomycin, sulfate (salt) Xn; R 21/22	0.4 %
50-02-2 Dexamethasone	0.11 %
56-81-5 glycerol	~ %
Non hazardous inert ingredients	~ %

**3 Hazards identification**

- Hazard description:



C Corrosive

- Information pertaining to particular dangers for man and environment:  
R 10 Flammable.  
R 34 Causes burns.
- Classification system:  
The classification was made according to the latest editions of

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**TRESADERM**

international substances lists, and from company and regulatory data.

- **NFPA ratings (scale 0 - 4)**



Health = 0  
 Fire = 1  
 Reactivity = 0

- **HMIS-ratings (scale 0 - 4)**



#### **4 First aid measures**

- **General information:**  
Immediately remove any clothing soiled by the product.
- **After inhalation:** Not an expected route of entry.
- **After skin contact:**  
No skin irritation is expected with this formulation.  
If skin irritation occurs, consult a doctor.
- **After eye contact:**  
Rinse opened eye for several minutes under running water. Then consult a doctor.
- **After swallowing:**  
Rinse out mouth and then drink plenty of water.  
Seek medical advice.

#### **5 Fire fighting measures**

- **Suitable extinguishing agents:**  
Use water spray or all purpose dry chemical.
- **Special hazards caused by the material, its products of combustion or resulting gases:**  
This material is NOT combustible under DOT/IATA/ICAO combustibility tests. If involved in fire, toxic gases including CO, CO<sub>2</sub>, phosphorous, fluorine, sulfur and nitrogen compounds may be generated.
- **Protective equipment:**  
Fire fighters should wear self-contained breathing apparatus and full protective equipment.

#### **6 Accidental release measures**

- **Person-related safety precautions:** Not required.
- **Measures for environmental protection:**  
Do not allow product to reach sewage system or any water course.
- **Measures for cleaning/collecting:**  
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).  
Use neutralizing agent.  
Dispose contaminated material as waste according to section XIII.  
Ensure adequate ventilation.

#### **7 Handling and storage**

- **Handling:**

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**TRESADERM**

- **Information for safe handling:**  
 Store in cool, dry place in tightly closed containers.  
 Handle with care. Avoid jolting and impact.  
 Use only in well ventilated areas.
- **Information about protection against explosions and fires:**  
 Keep ignition sources away - Do not smoke.  
 Protect against electrostatic charges.
- **Storage:**
- **Requirements to be met by storerooms and receptacles:**  
 Store only in the original container.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:**  
 Keep receptacle tightly sealed.  
 Store in a cool, dry, well ventilated place.
- **Recommended storage temperature:** 2.5°C-7.5°C

## 8 Exposure controls and personal protection

### Components with limit values that require monitoring at the workplace:

64-17-5 ethanol

ACGIH TLV: 1000 ppm

A4

NIOSH REL: 1900 mg/m<sup>3</sup>, 1000 ppmOSHA PEL: 1900 mg/m<sup>3</sup>, 1000 ppmMAK (Germany): 1900 mg/m<sup>3</sup>, 1000 ppm  
(DFG)

- **Personal protective equipment:**
- **General protective and hygienic measures:**  
 Keep away from foodstuffs, beverages.  
 Immediately remove all soiled and contaminated clothing.  
 Wash hands before breaks and at the end of work.  
 Avoid contact with the eyes and skin.  
 Do not eat, drink, smoke or inhale.  
 Do not store food in the working area.
- **Protection of hands:**



Rubber or other impervious gloves

- **Eye protection:** Not required under normal conditions of use.

## 9 Physical and chemical properties

- **Form:** Liquid
- **Color:** Light amber colored
- **Odor:** Not established

	<u>Value/Range</u>	<u>Unit</u>	<u>Method</u>
• <b>Change in condition</b>			
• <b>Melting point/Melting range:</b>	Undetermined.		
• <b>Boiling point/Boiling range:</b>	104	° C	
• <b>Flash point:</b>	37	° C	
• <b>Ignition temperature:</b>	425.0	° C	

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**Trade name: Thiabendazole**  
**TRESADERM**

- **Auto igniting:** Product is not self-igniting.
- **Danger of explosion:** Product is not explosive. However, formation of explosive air/vapor mixtures are possible.
- **Explosion limits:**
- **Lower:** 3.5 Vol %
- **Upper:** 15.0 Vol %
- **Vapor pressure:** at 20 ° C 59.0 hPa
- **Specific gravity:** 1.10-1.11
- **Solubility in / Miscibility with**
- **Water:** Not miscible or difficult to mix.
- **pH-value:** 1.8-2.8
- **Solvent content:**
- **Organic solvents:** 11.0 %

**10 Stability and reactivity**

- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Dangerous reactions** No dangerous reactions known.
- **Dangerous products of decomposition:** No dangerous decomposition products known.

**11 Toxicological information**

- **Acute toxicity:**  
**LD/LC50 values that are relevant for classification:**  
 64-17-5 ethanol  
 Oral: LD50: 7060 mg/kg (rat)  
 Inhalative: LC50/4 h: 20000 mg/l (rat)  
 50-02-2 Dexamethasone  
 Oral: LD50: 800 mg/kg (mouse)
- **Primary irritant effect:**
- **on the skin:** No irritating effect known.
- **on the eye:** Irritating effect.
- **Sensitization:** No sensitizing effects known.
- **Additional toxicological information:**  
 The product shows the following dangers according to internally approved calculation methods for preparations:  
 Corrosive.  
 Swallowing will lead to a strong caustic effect on mouth and throat and to the danger of perforation of esophagus and stomach.

**12 Ecological information**

- **Ecotoxological effects:**  
**Acquatic toxicity:**  
 148-79-8 Thiabendazole

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**Trade name: Thiabendazole**  
**TRESADERM**

LC50/8 days: 0.45 ppm (daphnia magna)

• **General notes:**

Must not reach bodies of water or drainage ditch undiluted or unneutralized.

**13 Disposal considerations**

• **Product:**

• **Recommendation:** Incinerate at an EPA approved incinerator facility.

• **Uncleaned packagings:**

• **Recommendation:**

Disposal must be made according to official regulations.

**14 Transport information**

• **DOT regulations:**

• **Hazard class:** -

• **Land transport ADR/RID (cross-border):**

• **ADR/RID class:** -

• **Maritime transport IMDG:**

• **IMDG Class:** -

• **Marine pollutant:** No

• **Air transport ICAO-TI and IATA-DGR:**

• **ICAO/IATA Class:** -

**15 Regulations**

• **Sara**

**Section 355 (extremely hazardous substances):**

None of the ingredients are listed.

**Section 313 (Specific toxic chemical listings):**

148-79-8 Thiabendazole

**TSCA (Toxic Substances Control Act):**

6303-21-5 phosphinic acid

64-17-5 ethanol

1405-10-3 Neomycin, sulfate (salt)

• **CA Proposition 65**

**Chemicals known to cause cancer:**

None of the ingredients are listed.

**Chemicals known to cause reproductive toxicity:**

1405-10-3 Neomycin, sulfate (salt)

• **Product related hazard informations:**

The product has been classified and marked in accordance with directives on hazardous materials.

• **Hazard symbols:** C Corrosive

• **Hazard-determining components of labelling:** phosphinic acid

• **Risk phrases:**

10 Flammable.

34 Causes burns.

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• **Safety phrases:**

- 1/2      Keep locked up and out of the reach of children.
- 7        Keep container tightly closed.
- 16      Keep away from sources of ignition - No smoking.
- 20      When using do not eat or drink.
- 25      Avoid contact with eyes.
- 26      In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
- 27/28   After contact with skin, take off immediately all contaminated clothing, and wash immediately with plenty of water.
- 29/56   Do not empty into drains, dispose of this material and its container at hazardous or special waste collection point
- 36/37/39 Wear suitable protective clothing, gloves and eye/face protection.
- 45      In case of accident or if you feel unwell, seek medical advice immediately.
- 64      If swallowed, rinse mouth with water (only if the person is conscious)

**16 Other information**

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- **Contact:** MSDS Coordinator, 706-552-2739, msds@merial.com

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