MATERIAL SAFETY DATA SHEET

MAIL TO: UNIVERSITY OF WISCONSIN
WHITEWATER CENTRAL RECEIVING STORES
N FREMONT ST
WHITEWATER, WI 53190

SECTION 1 - NAME AND PRODUCT

MANUFACTURER NAME AND ADDRESS
DIFCO LABORATORIES
P O BOX 331058
DETROIT MI 48223
EMERGENCY PHONE 800-521-0851

COMMON NAME (ON LABEL)
BACTROL DISKS

TRADE NAME & SYNONYMS
BACTROL DISKS

CHEMICAL NUMBER: D1649-354
ITEM NUMBER: 0422494
ENTRY DATE: 08-16-91
CHANGE DATE: 08-26-91
PD NUMBER: UN50366

SECTION 2 - HAZARDOUS INGREDIENTS

<table>
<thead>
<tr>
<th>HAZARDOUS COMPONENT</th>
<th>CAS</th>
<th>% (WT)</th>
<th>TLV</th>
<th>PEL</th>
</tr>
</thead>
<tbody>
<tr>
<td>SEE OTHER INGREDIENT INFORMATION</td>
<td></td>
<td>.00</td>
<td>NOT GIVEN</td>
<td>NOT GIVEN</td>
</tr>
</tbody>
</table>

PEL: Permissible Exposure Limit established by the Occupational Safety and Health Administration (OSHA).
TLV: Threshold Limit Value established by the American Conference of Governmental Industrial Hygienists, 1986-87.

OTHER INGREDIENT INFORMATION
BACTROL DISKS ARE NOT HAZARDOUS AS DEFINED BY OSHA 1910.1200. HOWEVER, AS LIVE MICROORGANISMS THEY ARE BIOHAZARDS. THEREFORE, OBSERVE INSTRUCTIONS IN SECTIONS 7 AND 9.

SECTION 3 - PHYSICAL DATA

<table>
<thead>
<tr>
<th>BOILING POINT</th>
<th>VOLATILE BY VOLUME (%)</th>
<th>VAPOR PRESSURE</th>
</tr>
</thead>
<tbody>
<tr>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>MELTING POINT</th>
<th>VAPOR DENSITY</th>
<th>SOLUBILITY IN WATER</th>
</tr>
</thead>
<tbody>
<tr>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>

| EVAPORATION RATE ( | SPECIFIC GRAVITY |
| = 1)              | N/A           |

<table>
<thead>
<tr>
<th>APPEARANCE AND ODOR</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>N/A</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>OTHER PHYSICAL DATA</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>NO OTHER PHYSICAL DATA GIVEN.</td>
<td></td>
</tr>
</tbody>
</table>
### SECTION 4 - FIRE AND EXPLOSION DATA

<table>
<thead>
<tr>
<th>Flash Point</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>N/A</td>
<td></td>
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</table>

<table>
<thead>
<tr>
<th>Lower Explosive Limit</th>
<th>Upper Explosive Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Extinguishing Media</th>
<th></th>
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</thead>
<tbody>
<tr>
<td>N/A</td>
<td></td>
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</tbody>
</table>

### SECTION 5 - HEALTH HAZARD DATA

#### Health Hazards (Acute & Chronic)
See signs and symptoms of overexposure.

#### Primary Routes of Exposure
Inhalation, ingestion, absorption

#### Signs and Symptoms of Exposure
Potential for infection if used with improper technique. See Section 10 - Special Precautions.
### SECTION 5 - HEALTH HAZARD DATA (CONTINUED)

**MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE**

NONE INDICATED.

**CARCINOGENICITY**

INDICATORS NOT GIVEN

<table>
<thead>
<tr>
<th>NTP</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>IARC</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>OSHA</td>
<td>Yes</td>
<td>No</td>
</tr>
</tbody>
</table>

**EMERGENCY AND FIRST AID PROCEDURES**

CALL A PHYSICIAN IN THE EVENT OF INHALATION, INGESTION, OR ABSORPTION.

### SECTION 6 - REACTIVITY DATA

**STABILITY**

Unstable  □  Stable  □

**CONDITIONS TO AVOID**

N/A

**INCOMPATIBILITY (MATERIALS TO AVOID)**

N/A
## SECTION 6 - REACTIVITY DATA (CONTINUED)

**HAZARDOUS DECOMPOSITION OR BYPRODUCTS**

N/A

**HAZARDOUS POLYMERIZATION**

May Occur ☐ Will Not Occur ☐

**CONDITIONS TO AVOID**

N/A

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## SECTION 7 - SPILL, LEAK, AND DISPOSAL PROCEDURES

**STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED**

1. Obtain a suitable bactericidal solution such as 70-90% isopropyl alcohol.
2. Remove unbroken vials with forceps and wash their surfaces with the above bactericidal solution. Unbroken vials may be retained for future use.
3. Collect exposed disks and contaminated packaging in a suitable container and follow "Waste Disposal Methods.”
4. Wash all exposed surfaces with the above bactericidal solution.

**WASTE DISPOSAL METHOD**

Autoclave for 30 minutes at 15 pounds pressure (121 deg. C), thoroughly incinerate, or submerge exposed disks in a liquid chlorine laundry bleach for 30 minutes.

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## SECTION 8 - SPECIAL PROTECTION INFORMATION

**RESPIRATORY PROTECTION**

N/A

**LOCAL VENTILATION**

N/A

**MECHANICAL VENTILATION**

N/A

**SPECIAL VENTILATION**

N/A
SECTION 8 - SPECIAL PROTECTION INFORMATION (CONTINUED)

OTHER VENTILATION
N/A

PROTECTIVE GLOVES
N/A

EYE PROTECTION
N/A

OTHER PROTECTIVE CLOTHING OR EQUIPMENT
N/A

SECTION 9 - SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE
BACTROL DISKS CONTAIN VIVABLE MICROORGANISMS AND SHOULD BE USED ONLY IN
LABORATORIES BY MICROBIOLOGISTS OR PERSONS UNDER THE SUPERVISION OF A MICROBIOLOGIST,
QUALIFIED BY TRAINING OR EXPERIENCE TO WORK WITH BACTERIA.

SECTION 10 - OTHER INFORMATION

MISCELLANEOUS INFO.
N/A = NOT APPLICABLE.

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