# Material Safety Data Sheet

## Section 1. Chemical Product and Company Identification

<table>
<thead>
<tr>
<th>NFPA</th>
<th>HMIS</th>
<th>Personal Protective Equipment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>See Section 15.</td>
</tr>
</tbody>
</table>

**Common Name/Trade Name**: Tergitol TMN-10(90% Aqueous)

**Manufacturer**: SPECTRUM LABORATORY PRODUCTS INC.
14422 S. SAN PEDRO STREET
GARDENA, CA 90248

**Commercial Name(s)**: Tergitol TMN-10 (90% AQ)

**Synonym**: Polyethylene glycol trimethylnonyl ether; Secondary Alcohol Ethoxylate

**Chemical Name**: 2,6,8-Trimethyl-4-Nonyloxypolyethyleneoxyethanol

**Chemical Family**: Alcohol Ethoxylates

**Chemical Formula**: Not available.

**Catalog Number(s)**: T1288

**CAS#**: 60828-78-6

**RTECS**: WA9210000

**TSCA**: TSCA 8(b) inventory: All components are TSCA listed

**CI#**: Not available.

**IN CASE OF EMERGENCY**
CHEMTREC (24hr) 800-424-9300
CALL (310) 516-8000

## Section 2. Composition and Information on Ingredients

### Exposure Limits

<table>
<thead>
<tr>
<th>Name</th>
<th>CAS #</th>
<th>TWA (mg/m³)</th>
<th>STEL (mg/m³)</th>
<th>CEIL (mg/m³)</th>
<th>% by Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) 4-Nonanol, 2,6,8-trimethyl-</td>
<td>123-17-1</td>
<td></td>
<td></td>
<td></td>
<td>&lt;2</td>
</tr>
<tr>
<td>2) Polyethylene glycol</td>
<td>25322-68-3</td>
<td></td>
<td></td>
<td></td>
<td>&lt;3</td>
</tr>
<tr>
<td>3) Water</td>
<td>7732-18-5</td>
<td></td>
<td></td>
<td></td>
<td>10</td>
</tr>
<tr>
<td>4) Polyethylene glycol trimethylnonyl ether</td>
<td>60828-78-6</td>
<td></td>
<td></td>
<td></td>
<td>&gt;87</td>
</tr>
<tr>
<td>5) This product may contain trace amounts of the following:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acetaldehyde (&lt;0.0006%)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1,4-Dioxane (&lt;0.0005%)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Formaldehyde (&lt;0.0004%)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ethylene Oxide (&lt;0.0020%)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Toxicological Data on Ingredients

**ORAL (LD50)**: Acute: 5650 mg/kg [Rat].

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*Continued on Next Page*
### Section 3. Hazards Identification

<table>
<thead>
<tr>
<th>Potential Acute Health Effects</th>
<th>Hazardous in case of eye contact (irritant). Slightly hazardous in case of skin contact (irritant, permeator), of ingestion, of inhalation.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Potential Chronic Health Effects</td>
<td><strong>CARCINOGENIC EFFECTS</strong>: Not available. <strong>MUTAGENIC EFFECTS</strong>: Not available. <strong>TERATOGENIC EFFECTS</strong>: Not available. <strong>DEVELOPMENTAL TOXICITY</strong>: Not available. Repeated or prolonged exposure is not known to aggravate medical condition.</td>
</tr>
</tbody>
</table>

### Section 4. First Aid Measures

| Eye Contact | Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Cold water may be used. Get medical attention. |
| Skin Contact | Wash with soap and water. Cover the irritated skin with an emollient. Get medical attention if irritation develops. Cold water may be used. |
| Serious Skin Contact | Not available. |
| Inhalation | If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention. |
| Serious Inhalation | Not available. |
| Ingestion | Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention if symptoms appear. |
| Serious Ingestion | Not available. |

### Section 5. Fire and Explosion Data

| Flammability of the Product | May be combustible at high temperature. |
| Auto-Ignition Temperature | Not available. |
| Flash Points | Not available. |
| Flammable Limits | Not available. |
| Products of Combustion | These products are carbon oxides (CO, CO2). |
| Fire Fighting Media and Instructions | SMALL FIRE: Use DRY chemical powder. LARGE FIRE: Use water spray, fog or foam. Do not use water jet. |
| Special Remarks on Fire Hazards | Not available. |
| Special Remarks on Explosion Hazards | Not available. |
Section 6. Accidental Release Measures

Small Spill
Dilute with water and mop up, or absorb with an inert dry material and place in an appropriate waste disposal container. Finish cleaning by spreading water on the contaminated surface and dispose of according to local and regional authority requirements.

Large Spill
Absorb with an inert material and put the spilled material in an appropriate waste disposal. Finish cleaning by spreading water on the contaminated surface and allow to evacuate through the sanitary system.

Section 7. Handling and Storage

Precautions
Keep away from heat. Keep away from sources of ignition. Ground all equipment containing material. Do not ingest. Do not breathe gas/fumes/vapor/spray. Avoid contact with eyes. Wear suitable protective clothing. If ingested, seek medical advice immediately and show the container or the label. Keep away from incompatibles such as oxidizing agents, acids, alkalis.

Storage
Keep container tightly closed. Keep container in a cool, well-ventilated area.

Section 8. Exposure Controls/Personal Protection

Engineering Controls
Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value. Ensure that eyewash stations and safety showers are proximal to the work-station location.

Personal Protection
Safety glasses or Splash goggles. Lab coat or Synthetic apron. Gloves (impervious). Respiratory protection is normally not required for usual industrial handling. Respiratory protection is needed if ventilation is inadequate and exposure limits are exceeded and if handling of material produces mist/aerosol or vapor.

Personal Protection in Case of a Large Spill
Splash goggles. Full suit. Boots. Gloves. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

Exposure Limits
Polyethylene Glycol:
TWA: 10 (mg/m$^3$) from AIHA (WEELs) [United States] Inhalation
Consult local authorities for acceptable exposure limits.

Section 9. Physical and Chemical Properties

Physical state and appearance
Liquid.

Molecular Weight
approximately 683 g/mole

pH (1% soln/water)
Not available.

Boiling Point
>100°C (212°F)

Melting Point
-7.2°C (19°F)

Critical Temperature
Not available.

Specific Gravity
1.044 (Water = 1)

Vapor Pressure
2 kPa (@ 20°C)

Vapor Density
<1 (Air = 1)

Volatility
Not available.

Odor Threshold
Not available.

Water/Oil Dist. Coeff.
Not available.

Ionicity (in Water)
Not available.

Dispersion Properties
See solubility in water.

Solubility
Soluble in cold water, hot water.

Continued on Next Page
# Section 10. Stability and Reactivity Data

<table>
<thead>
<tr>
<th>Stability</th>
<th>The product is stable.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Instability Temperature</td>
<td>Not available.</td>
</tr>
<tr>
<td>Conditions of Instability</td>
<td>Excess heat, incompatible materials</td>
</tr>
<tr>
<td>Incompatibility with various substances</td>
<td>Reactive with oxidizing agents, acids, alkalis.</td>
</tr>
<tr>
<td>Corrosivity</td>
<td>Not available.</td>
</tr>
</tbody>
</table>

Special Remarks on Reactivity: Normally unreactive. However, avoid strong bases at high temperatures, strong acids, strong oxidizing agents, and materials reactive with hydroxyl compounds.

Special Remarks on Corrosivity: Not available.

Polymerization: Will not occur.

# Section 11. Toxicological Information

<table>
<thead>
<tr>
<th>Routes of Entry</th>
<th>Absorbed through skin. Eye contact.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Toxicity to Animals</td>
<td>Acute oral toxicity (LD50): 5650 mg/kg [Rat].</td>
</tr>
<tr>
<td>Chronic Effects on Humans</td>
<td>Not available.</td>
</tr>
<tr>
<td>Other Toxic Effects on Humans</td>
<td>Slightly hazardous in case of skin contact (irritant, permeator), of ingestion, of inhalation.</td>
</tr>
</tbody>
</table>

Special Remarks on Toxicity to Animals: LD50 [Rabbit] - Route: Skin; Dose: 4780 ul/kg.

This product may contain trace amounts of the following which may cause cancer:
- Acetaldehyde
- 1,4-Dioxane
- Formaldehyde
- Ethylene Oxide

This product may contain trace amounts of the following which may cause reproductive harm:
- Ethylene Oxide

Special Remarks on other Toxic Effects on Humans: Acute Potential Health Effects:
- Skin: May cause skin irritation. It may be absorbed through the skin, but no evidence of harmful effects was found from available information.
- Eyes: Causes severe eye irritation with possible chemical burns and conjunctivitis. Corneal injury may be severe, extensive, and if not treated promptly, could result in impairment of vision.
- Inhalation: May cause respiratory tract irritation. Short-term harmful health effects are not expected from vapor generated at ambient temperature.
- Ingestion: May cause irritation of the digestive tract (mouth, throat, esophagus, and stomach) with pain or discomfort in the mouth, throat, and chest and abdomen; nausea, vomiting, diarrhea, thirst. May also affect behavior and respiration. Symptoms may include dizziness, drowsiness, sluggishness, unsteady gait, weakness, and rapid breathing. Aspiration into the lungs may occur during ingestion or vomiting, resulting in lung injury.
- Chronic Potential Health Effects:
  - Skin: Repeated or prolonged skin contact may cause dermatitis. Prolonged contact may also cause more severe irritation and possible tissue destruction.
### Section 12. Ecological Information

<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ecotoxicity</td>
<td>Ecotoxicity in water (LC50): 164.9 mg/l 48 hours [Daphnia]. 103 mg/l 96 hours [Fathead Minnow].</td>
</tr>
<tr>
<td>BOD5 and COD</td>
<td>Not available.</td>
</tr>
<tr>
<td>Products of Biodegradation</td>
<td>Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.</td>
</tr>
<tr>
<td>Toxicity of the Products of Biodegradation</td>
<td>The product itself and its products of degradation are not toxic.</td>
</tr>
<tr>
<td>Special Remarks on the Products of Biodegradation</td>
<td>Not available.</td>
</tr>
</tbody>
</table>

### Section 13. Disposal Considerations

**Waste Disposal**

Waste must be disposed of in accordance with federal, state and local environmental control regulations.

### Section 14. Transport Information

**DOT Classification**

Not a DOT controlled material (United States).

**Identification**

Not applicable.

**Special Provisions for Transport**

Not applicable.

**DOT (Pictograms)**

![D.O.T. Pictogram]

### Section 15. Other Regulatory Information and Pictograms

**Federal and State Regulations**

California prop. 65: This product contains the following ingredients for which the State of California has found to cause cancer, birth defects or other reproductive harm, which would require a warning under the statute: Ethylene Oxide; Acetaldehyde; 1,4-Dioxane; Formaldehyde.

California prop. 65: This product contains the following ingredients for which the State of California has found to cause reproductive harm (female) which would require a warning under the statute: Ethylene Oxide

California prop. 65: This product contains the following ingredients for which the State of California has found to cause birth defects which would require a warning under the statute: No products were found.

California prop. 65: This product contains the following ingredients for which the State of California has found to cause cancer which would require a warning under the statute: Ethylene Oxide; Acetaldehyde; 1,4-Dioxane; Formaldehyde.

TSCA §8(b) inventory:

Polyethylene glycol trimethylol ether; water; Polyethylene Glycol; 4-Nonanol, 2,6,8-trimethyl-

Pennsylvania (Right to Know), and Massachusetts (Right to Know): 4-Nonanol, 2,6,8-trimethyl-

Minnesotta: Polyethylene Glycols

**California Proposition 65 Warnings**

California prop. 65: This product contains the following ingredients for which the State of California has found to cause cancer which would require a warning under the statute: Acetaldehyde; 1,4-Dioxane; Formaldehyde; Ethylene Oxide

California prop. 65: This product contains the following ingredients for which the State of California has found to cause birth defects which would require a warning under the statute: No products were found.

**Other Regulations**

Continued on Next Page
CAS no. 60828-78-6 can be found on the following Lists:
- Canada: Domestic Substances List (DSL)
- Australia: National Inventory (AICS)
- Korea: National Inventory (KECI)
- Philippines: National Inventory (PICCS)

CAS no. 123-17-1 can be found on the following lists:
- Canada: Domestic Substances List (DSL)
- Australia: National Inventory (AICS)
- China Inventory
- Japan: National Inventory (ENCS)
- Korea: National Inventory (KECI)
- Philippines: National Inventory (PICCS)

CAS no. 24322-68-3 can be found on the following lists:
- Australia: National Inventory (AICS)
- China Inventory
- Japan: National Inventory (ENCS)
- Korea: National Inventory (KECI)
- Philippines: National Inventory (PICCS)

**WHMIS Classification** is unavailable. However, it might be classified as: CLASS D-2B: Material causing other toxic effects (TOXIC).

**R36** Irritating to eyes.

S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

**Health Hazard** Health
- **2**

**Fire Hazard** Fire
- **1**

**Reactivity** Reactivity
- **0**

**Specific Hazard** Specific hazard

**National Fire Protection Association (U.S.A.)**

**Personal Protection** Personal Protection
- **j**

**Gloves (impervious)**

Continued on Next Page
Section 16. Other Information

<table>
<thead>
<tr>
<th>MSDS Code</th>
<th>T3116</th>
</tr>
</thead>
<tbody>
<tr>
<td>References</td>
<td>Not available.</td>
</tr>
<tr>
<td>Other Special Considerations</td>
<td>Not available.</td>
</tr>
</tbody>
</table>

Verified by Sonia Owen.  
Printed 9/14/2006.

CALL (310) 516-8000

Notice to Reader

All chemicals may pose unknown hazards and should be used with caution. This Material Safety Data Sheet (MSDS) applies only to the material as packaged. If this product is combined with other materials, deteriorates, or becomes contaminated, it may pose hazards not mentioned in this MSDS. It shall be the user's responsibility to develop proper methods of handling and personal protection based on the actual conditions of use. While this MSDS is based on technical data judged to be reliable, Spectrum Quality Products, Inc. assumes no responsibility for the completeness or accuracy of the information contained herein.