Section 1. Identification of the Substance/Preparation and Company

PRODUCT NAME: TP-3090
DESCRIPTION: Fluorescent Dye for Gasoline Engine Oil Systems
USE: Leak Detection

EMERGENCY TELEPHONE #: 800-424-9300 (24 HOURS) CHEMTREC; For calls originating outside continental U.S.: 202-483-7616.
PRODUCT INFORMATION: Andreas Haberland, Spectronics Corporation, 956 Brush Hollow Road, Westbury, NY 11590, 800-641-1133.

Section 2. Composition/Information on Ingredients

<table>
<thead>
<tr>
<th>Common Name/Chemical Name</th>
<th>CAS Number</th>
<th>% W</th>
<th>PEL(mg/m³)</th>
<th>TLV(mg/m³)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lubricant Oil</td>
<td>See Below</td>
<td>60-90</td>
<td>5*</td>
<td>5*</td>
</tr>
<tr>
<td>Fluorescent Dye</td>
<td>See Below</td>
<td>5-10</td>
<td>NA</td>
<td>NA</td>
</tr>
</tbody>
</table>

Lubricant Oil: The specific identity has been withheld as a trade secret. New Jersey Trade Secret Registry Number NJ EIN 80100312-5010P.
Fluorescent Dye: The specific identity has been withheld as a trade secret. New Jersey Trade Secret Registry Number NJ EIN 80100312-5000P.

*Airborne Oil Mist Exposure Limits: Lubricant Oil
ACGIH TLV: 5 mg/m³, 8 hr
ACGIH STEL: 10 mg/m³
OSHA-PEL: 5 mg/m³, 8 hr

Section 3. Hazards Identification

EMERGENCY OVERVIEW: Combustible liquid and vapor. May cause eye and skin irritation. Do not inhale, can cause respiratory system irritation. Do not swallow, can cause digestive tract irritation, nausea, vomiting, diarrhea.

Primary Routes of Exposure: Eye. Skin. Inhalation (breathing).

Eye Contact: Can cause slight to mild irritation. Skin Contact: Irritation can occur following prolonged or repeated contact. Inhalation (breathing): Can cause irritation to eyes, nose, and respiratory tract following prolonged exposure. Ingestion (swallowing): Irritation to the mouth, throat, and stomach. Additional Effects: Depending on the route, frequency, and duration of exposure, toxicity may effect in the following organs and/or systems: Eye. Aggravation of Existing Conditions: Exposure to this product is not expected to contribute to, worsen or aggravate any existing medical conditions.

Carcinogenicity:

<table>
<thead>
<tr>
<th></th>
<th>ACGIH</th>
<th>IARC</th>
<th>NTP</th>
<th>OSHA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lubricant Oil</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Fluorescent Dye</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>

HMIS HAZARD RATING: Health: 1, Fire: 2, Reactivity: 0.

Section 4. First-Aid Measures

Eye Contact: Flush eyes with plenty of water for 15 minutes. If irritation develops, consult a physician. Skin Contact: Remove contaminated clothing. Wash affected area with soap and plenty of water. If irritation develops, consult a physician. Wash contaminated clothing separately before reuse. Inhalation (breathing): Remove to fresh air. If symptoms develop, seek immediate medical attention. If not breathing, give artificial respiration. Ingestion (swallowing): Call a physician immediately. Induce vomiting only as directed by medical personnel. Note to Physician: Treatment should be directed at preventing absorption, administering to the symptoms as they occur, and providing supportive therapy.

Section 5. Fire-Fighting Measures

Flash Point: Greater than 188°F (87°C); Test Method: SETAFLASH Closed Cup; Explosive Limit: LEL(%): Not Determined; UEL(%): Not Determined; Autoignition Temperature: Not Determined. Hazardous Combustion and Decomposition Products: Smoke, soot, and toxic/irritating fumes (i.e., carbon dioxide, carbon monoxide, etc.). Oxides of nitrogen. Fire and Explosion Hazards: May liberate irritating or toxic vapors during combustion or decomposition. Extinguishing Media: Small Fires: Use dry chemical, carbon dioxide, halon, water, spray, or foam. Large Fires: Water spray, fog, or alcohol foam. Fire-Fighting Procedures/Equipment: Fire fighters and others who may be exposed to the products of combustion should be equipped with NIOSH-approved, positive-pressure, self-contained breathing apparatus (SCBA) and full protective clothing.
Section 6. Accidental Release Measures
Evacuation: Isolate hazard area. Keep unnecessary and unprotected personnel from entering. Contaminant: Safely stop discharge. Contain material, as necessary, with a dike or barrier. Stop material from contaminating soil, or from entering sewers or bodies of water. Clean-Up/Personal Protection Equipment: Appropriate safety measures and protective equipment should be used. Use supplied air respirator or self-contained breathing apparatus in enclosed space or if airborne exposure limits can be exceeded. See Section 2. Collection and Disposal: Stop discharge, if safe to do so. Use proper protective equipment. Use nonsparking tools and/or explosion-proof equipment. Stop ignition sources. Cover spills with absorbent clay or sawdust and place in closed chemical waste containers. Dispose of according to applicable local, state and federal regulations.

Section 7. Handling and Storage
Storage Conditions: Store in a cool, dry, well-ventilated area away from heat, ignition sources, and direct sunlight. Always keep containers tightly closed. Special Warning: Hot organic chemical vapors or mists can suddenly and without warning combust when mixed with air. Ignition can occur at typical elevated temperature process conditions. Any use in such processes should be evaluated thoroughly to assure safe operating conditions. Transfer: Containers should be supported and grounded before opening, dispensing, mixing, pouring, and emptying. Open with nonsparking tools. If container is warm, open bung slowly to release internal pressure. Personal Hygiene: Wash thoroughly after handling, especially before eating, drinking, smoking, or using restroom facilities. Contaminated clothing and shoes should be thoroughly cleaned and dried before reuse. Empty Container Precautions: Empty containers can retain product residues. Do not reuse empty container for food, clothing, or products for human or animal consumption or where skin contact may occur.

Section 8. Exposure Controls/Personal Protection
Engineering Controls/Ventilation: Maintain airborne concentrations below the established exposure limits (see PEL and TLV in section 2) by providing adequate ventilation. General (dilution) ventilation may be acceptable, however, local exhaust ventilation is recommended when vapors, mists, or dusts can be released. Eye Protection: Wear safety goggles. An eye wash facility should be readily available. Skin Protection: Wear protective clothing and appropriate impervious gloves. Because a variety of protective gloves exist, always consult glove manufacturer to determine the proper type for specific operation. Respiratory Protection: Avoid breathing vapor and/or mist. If occupational exposure limits are exceeded wear NIOSH/OSHA approved equipment. Determine the appropriate type by consulting the respirator manufacturer. High airborne concentrations may necessitate the use of self-contained breathing apparatus (SCBA) or a supplied air respirator. Respiratory protection programs must be in compliance with 29 CFR 1910.134.

Section 9. Physical and Chemical Properties
Appearance: Dark brown; Odor: Light blend petroleum; Physical State: Liquid; Specific Gravity (Water=1): 0.9; Vapor Pressure 68° F (20° C): <0.01 mmHg @ 20° C; Vapor Density (Air=1): >5; Percent Volatile by Volume (%): 0; Evaporation Rate (Butyl Acetate=1): <0.01; Solubility in Water: Insoluble; pH: Not Applicable; Boiling Range: >212° F (100° C); Volatile Organic Compounds (VOC) Content: Not Determined. Note: The physical data presented above are typical values and should not be construed as a specification.

Section 10. Stability and Reactivity

Section 11. Toxicological Information

<table>
<thead>
<tr>
<th>Type</th>
<th>Value</th>
<th>Lubricant Oil</th>
<th>Fluorescent Dye*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oral LD₅₀</td>
<td>Rat</td>
<td>&gt; 5000 mg/kg</td>
<td>&gt; 5000 mg/kg</td>
</tr>
<tr>
<td>Dermal LD₅₀</td>
<td>Rabbit</td>
<td>&gt; 2000 mg/kg</td>
<td>&gt; 2000 mg/kg</td>
</tr>
<tr>
<td>Inhalation LC₅₀</td>
<td>Rat</td>
<td>Not available</td>
<td>Not available</td>
</tr>
<tr>
<td>Eye Irritation</td>
<td>Rabbit</td>
<td>Slight irritation</td>
<td>Slight irritation</td>
</tr>
<tr>
<td>Skin Irritation</td>
<td>Rabbit</td>
<td>Slight irritation</td>
<td>Mild irritation</td>
</tr>
</tbody>
</table>

*Fluorescent Dye: Negative results were obtained in the Ames test. Negative results were obtained in the micronucleus assay.
Section 12. Ecological Information
No data are available on this product.

Section 13. Disposal Considerations
Disposal: Dispose of in accordance with all local, state, and federal regulations. General Statements: Federal regulations may apply to empty container. State and/or local regulations may be different. General Recommendations: Of the methods of disposal currently available, it is recommended that an alternative be selected according to the following order of preference, based on environmental acceptability: (1) recycle or rework if at all feasible, (2) incinerate at an authorized facility, or (3) treat at an acceptable waste treatment facility. Special Instructions: Be sure to contact the appropriate government environmental agencies if further guidance is required.

Section 14. Transport Information
DOT Shipping Name: Not Regulated; DOT Label: Not Applicable; DOT Identification No.: Not Applicable; Nonregulated shipments by air under 49 CFR, IATA/ICAO AND IMO.

Section 15. Regulatory Information
U.S. Federal Regulatory Information:
This product is considered hazardous under the OSHA Hazard Communication Standard (29 CFR 1910.1200).
SARA Title III Information:
TSCA: The chemical components of this product are contained on the Section 8(B) Chemical Substance Inventory List (40 CFR 710).
CERCLA: No regulated ingredients.
State Right-To-Know:
Pennsylvania - New Jersey R-T-K:

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California - California Proposition 65: No regulated ingredients.
CONEG: None.
Canada: This is a “controlled product” under the Canadian Workplace Hazardous Materials Information System (WHMIS).
Class B Division 3 Class D Division 2 Subdivision B
CEPA - NPRI - No regulated ingredients.

Section 16. Other Information
USER'S RESPONSIBILITY: A bulletin such as this cannot be expected to cover all possible individual situations. As the user has the responsibility to provide a safe workplace, all aspects of an individual operation should be examined to determine if, or where, precautions (in addition to those described herein) are required. Any health hazard and safety information contained herein should be passed on to your customers or employees, as the case may be.
DISCLAIMER OF LIABILITY: The information contained herein is, to the best of our knowledge and belief, accurate. However, since the conditions of handling and use are beyond our control, we make no guarantee of results, and assume no liability for damages incurred by use of this material. All chemicals may present unknown health hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards which exist. Final determination of suitability of the chemical is the sole responsibility of the user. No representations or warranties, either expressed or implied, of merchantability, fitness for a particular purpose or any other nature are made hereunder with respect to the information contained herein or the chemical to which the information refers. It is the responsibility of the users to comply with all applicable federal, state and local laws and regulations.

NA = Not Available

End of Material Safety Data Sheet