Section 1: Identification

GHS Product Identifier: TP-9770
Other Names: TP-9770-0004CS
TP-9770-0304
TP-9770-0108
Use of Product: Leak Detection
Description: Universal Fluorescent Dye for Mobile AC&R Systems, R-134a/Polyol Ester
Company Information: Spectronics Corporation
956 Brush Hollow Road
Westbury, New York 11590
800-641-1133
516-333-1254 (for calls originating outside continental U.S.)
Emergency Contact: 800-424-9300 (24 HOURS) CHEMTREC; Call collect outside continental U.S.: 703-527-3887.

Section 2: Hazardous Identification

Classification of Product: Warning

Pictogram: No Pictogram

Signal Word: None

Hazard Statement:
None

Precautionary Statements:
P261- Avoid breathing in mists/vapors/sprays
P273- Avoid release into the environment
P281- Use Personal Protective Equipment as Required
P302 + P350- If on skin: wash with plenty of soap and water.
P304 + P312- If inhaled, call a poison center or a doctor/physician if you feel unwell
P305 + P351 + P338- If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing

HMIS Hazard Rating: Health: 1, Fire: 1, Reactivity: 0.

Section 3: Composition/Information on Ingredients

Chemical Identity: TP-9770
Synonyms: See Section 1 Above

Common Name/Chemical Name	CAS Number	ELINCS	% W
Polyol Ester Oil	See Below	See Below	50-70
Naphthalimide Dye	See Below	See Below	30-50

Polyalkylene Glycol Oil: The specific identity and composition has been withheld as a trade secret, New Jersey Trade Secret Registry Number NJ TSRN 80100312-5004P
Naphthalimide Dye: The specific identity and composition has been withheld as a trade secret, New Jersey Trade Secret Registry Number NJ TSRN 80100312-5002P

Section 4: First-Aid Measures

Primary Routes of Exposure:

Inhalation: Remove to fresh air. If symptoms develop, seek immediate medical attention. If not breathing, give artificial respiration.
Eye Contact: Flush eyes with water for 15 minutes. If irritation develops, consult a physician
Skin Contact: Wash affected area with soap and water and rinse thoroughly. If irritation develops, consult a physician.
Ingestion: Call a physician immediately. Induce vomiting only as directed by medical personnel.

Aggravation of Existing Conditions: Exposure to this product is not expected to contribute to, worsen or aggravate any existing medical conditions.
Most Important Symptom: Treat symptomatically

Section 5: Fire-Fighting Measures

Flash Point: 500° F (260° C)
Test Method: Cleveland Closed Cub
Explosive Limit: LEL(%): Not Determined; UEL(%): Not Determined
Autoignition Temperature: Not Determined.
Unusual Fire and Hazardous Combustion and Decomposition Products: Smoke, soot, and toxic/irritating fumes (i.e., carbon dioxide, carbon monoxide, etc.). Oxides of nitrogen and carbon
Fire and Explosion Hazards: May liberate irritating or toxic vapors during combustion or decomposition.
Extinguishing Media: Based on the NFPA guide, use dry chemical, carbon dioxide, water mist, water jet sprays, halogen, or alcohol foam suitable for Class B fires. Use water to cool containers exposed to fire. For large fires, use water spray, fog or alcohol foam, thoroughly drenching the burning material.
Unsuitable Extinguishing Media: High volume water with full jet. Oxidizers and reducers
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. Water can be used to cool and protect containers and surroundings.

Section 6: Accidental Release Measures

Non-Emergency Personnel:

General Advice: Avoid inhalation and contact with skin, eyes, or clothing. Wash hands and face before eating, drinking, or using tobacco products.
Personal Protective Equipment Needed: Wear impervious gloves, shoes, and protective clothing

Emergency Personnel:

Suitable Protective Gear: Wear impervious gloves, shoes and protective clothing.
Unsuitable Protective Gear: Not Applicable

Environmental Precautions: Prevent any contamination of local soils and water supply. Prevent ground water infiltration or any ground penetration. Avoid the spreading or entering into watercourses by using sand, soil, or other types of barriers. If contamination into water course or sewage system, alert appropriate authorities.

Containment/Clean-up Methods:

Containment & Recovery of Product: Contain with absorbent material, such as clay, soil, universal binding medium, or any commercially available absorbent. Shovel reclaimed dye and absorbent into a recovery or salvage drums for disposal. For larger spills, transfer to a salvage tank for recovery or safe disposal. Any residues should be treated like a small spill. This is not a RCRA hazardous waste per Title 40 CFR 261. Stop material from contaminating soil, or from entering sewers or bodies of water. For larger spills, transfer to a salvage tank for safe recovery/disposal. Residues are treated as small spills.
Disposal**:** Either incinerate or land fill in accordance with applicable local, state and federal regulations.

Section 7: Handling and Storage

Handling Precautions: Use product only in well ventilated areas. Avoid breathing in mists or vapors from a heated product. Avoid formation of mists. Avoid being product near flash point. Avoid prolonged or repeated contact with skin. Handle in ambient temperature.
Storage Conditions: Store in a cool, dry, well-ventilated area away from heat, ignition sources, and direct sunlight. Always keep containers tightly closed. Store away from oxidizing and reducing agents.
Personal Hygiene: Wash hands before breaks and at the end of the work day. Do not carry cleaning clothes used to absorb product in clothing. General hygiene measures for chemicals apply.
Empty Container Precautions: Do not reuse empty container for any purpose.
Special Warnings: Hot organic chemical vapors or mists can suddenly and without warning combust when mixed with air.

Section 8: Exposure Controls/Personal Protection

Occupational Exposure Limits: Not Applicable
Biological Exposure Limits: Not Applicable
Engineering Controls/Ventilation: Maintain airborne concentrations below the established exposure limits by providing adequate ventilation. General (dilution) ventilation should be acceptable.
Airborne Oil Mist Exposure Limits: Polyol Ester Oil
ACGIH TLV: 5 mg/m^3, 8 hr ACGIH STEL: 10 mg/m^3 OSHA PEL: 5mg/m^3, 8 hr
Personal Protective Equipment:

Respiratory Protection: Avoid breathing vapor and/or mist. If occupational exposure limits are exceeded wear NIOSH/OSHA approved equipment. Use a respiratory protection fitted with a combination filter A-P3 for short term use. 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.
Skin Protection: Wear protective clothing and appropriate impervious gloves.
Eye Protection: Wear safety goggles with peripheral coverage approved to EU Standard EN 166, AS/NZS 1337. An eye wash facility should be readily available.
Hand Protection: When in contact with material, be sure to use proper gloves approved to standards (Europe: EN 374, U.S.: F739, & AS/NZS: 2161). Gloves made from neoprene, nitrile or butyl rubber may provide suitable chemical protection.
Hygiene Measures: Wash thoroughly after handling, especially before eating, drinking, smoking, or using restroom facilities.

Section 9: Physical and Chemical Properties

Physical State: Liquid
Appearance: Amber
Odor: Mild
Odor Threshold: Not Available
pH: Not Applicable
Melting Point: Not Available
Freezing Point: Not Available
Initial Boiling Point: Not Available
Boiling Range: 400 °F (204 °C)
Flash Point: 500° F (260° C)
Evaporative Rate: Not Available
Solid Flammability: Not Available
Gas Flammability: Not Available
Upper Explosive Limit: Not Available
Lower Explosive Limit: Not Available
Vapor Pressure 68° F (20° C): < 0.01 mmHg @ 20° C
Vapor Density(Air=1): >1
Relative Density: 0.98
Solubility in Water: Not Soluble
Partition Coefficient: n-octanol/water: Not Available
Auto-ignition Temperature: Not Available
Decomposition Temperature: Not Available
Viscosity at 40°C: Not Available
Percent Volatile by Volume (%):0
Evaporation Rate (Butyl Acetate=1): < 0.01
Volatile Organic Compounds (VOC) Content: None

Note: The physical data presented above are typical values and should not be construed as a specification.

Section 10: Stability and Reactivity

Reactivity: This product is non-reactive under ambient conditions
Stability: Stable under normal conditions of use. Can decompose slowly with localized heating over 300°C
Conditions to Avoid: High temperatures & a source of ignition. Toxic fumes may be released if product is heated above decomposition point.
Incompatible Materials: Strong Acids, Oxidizing agents, and Reducing agents

Hazardous Decomposition Products: Incomplete combustion may produce CO, CO_2, aldehydes, and other asphyxiants. Smoke, soot, and toxic/irritating fumes. Oxides of nitrogen and carbon
Hazardous Polymerization: Will not occur

Section 11: Toxicological Information

Acute Toxicity: No data are available on this product
Skin Corrosion/Irritant: No data are available on this product
Serious Eye Damage/Irritant: No data are available on this product
Respiratory or Skin Sensitization: No data are available on this product
Germ Cell Mutagenicity: No data are available on this product
Carcinogenicity:

Carcinogenicity	ACGIH	IARC	NTP	OSHA
Lubricant Oil	No	No	No	No
Fluorescent Dye	No	No	No	No

Summary Comments: According to ACGIH, IARC, NTP, and OSHA, neither the lubricant oil nor fluorescent dye is considered to be a hazardous carcinogen to humans.

Reproductive Toxicity: No data are available on this product
STOT-single exposure: No data are available on this product
STOT-repeated exposure: No data are available on this product
Aspiration Hazard: No data are available on this product
Likely Routes of Exposure: Eyes, Skin, and Respiratory Tract.
Symptoms:
Eye Contact: Can cause mild irritation
Skin Contact: Irritation can occur following prolonged or repeated contact
Inhalation: Processing vapors can possible cause irritation to the upper respiratory tract
Ingestion: Ingestion can cause gastrointestinal irritation

Section 12: Ecological Information

Toxicity: No data are available on this product
Persistence & Degradability: No data are available on this product
Bioaccumulation Potential: No data are available on this product
Mobility in Soil: No data are available on this product
Behavior in Sewage Plants: mechanical precipitation is possible.

Section 13: Disposal Considerations

General Statements: Federal regulations may apply to empty container. State and/or local regulations may be different.
Disposal: Recover or recycle if possible, otherwise, dispose of in accordance with all local, state, and federal regulations. Sewage disposal is discouraged
Special Instructions: Be sure to contact the appropriate government environmental agencies if further guidance is required. Do not remove labels from container until container is cleaned properly. Containers can be reused or disposed of by landfill or incineration if appropriate to local law. Water with cleaning agents is required

Section 14: Transport Information

General Comments: This product is not classed as hazardous or regulated for transport under ADR Regulation in Europe
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.
UN Number: Not Applicable
UN Shipping Name: Not Applicable
Transport Hazard Class: Not Applicable

Packing Group Number: Not Applicable
Environmental Hazards: Not Applicable

Section 15: Regulatory Information

U.S. Federal Regulatory Information: This product is not considered hazardous under the OSHA Hazard Communication Standard (29 CFR 1910.1200).
Inventory Status: Polyol Ester Oil can be found on TSCA, DSL, IECSC, & ENCS/MITI inventories
Naphthalimide Dye can be found on TSCA, DSL, & ENC/MITI inventories
SARA Title III Information: Not Available
Ozone-Depleting Chemicals: No regulated ingredients.
Section 302-Extremely Hazardous Substances: No regulated ingredients.
Section 302-Reportable Quantity: None.
Section 311/312-Hazard Categories:
Fire Hazard: No
Sudden Release of Pressure Hazard: No
Reactivity Hazard: No
Immediate (Acute) Health Hazard: No
Delayed (Chronic) Health Hazard: No
Section 313-Toxic Chemicals: No regulated ingredients.
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:

NAME	CAS NO. or NJ TSRN	%W
Polyol Ester Oil	80100312-5004P	50-70
Naphthalimide Dye	80100312-5002P	30-50

California - California Proposition 65: This product contains no chemical(s) known to the state of California to cause cancer.
Canada: Not regulated

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