

Material Safety Data Sheet

Effective: 8-4-98
Supercedes: 4-27-98Emergency Telephone #: 1-800-424-9300 (24 Hours) CHEMTREC For calls originating outside continental U.S.: 202-483-7616
Product Information: 1-800-274-8888 For calls originating outside U.S. or Canada: 516-333-4840

Section 1. Identification of the Substance/Preparation and Company

Product Name: GS-1/E, GS-2/E, GS-3/E, GS-101/E.**Description:** Fluorescent Dye for Air Conditioning Systems, Ester Lubricants
Use: Leak Detection**Product Information:** Andreas Haberland, Spectronics Corporation, 956 Brush Hollow Road, Westbury, NY 11590, 800-274-8888.

Section 2. Composition/Information on Ingredients

Product	Common Name/ Chemical Name	CAS Number	% W	PEL (mg/m ³)	TLV (mg/m ³)
GS-101/E	Fluorescent Dye	See Below	20-40	NA	NA
	Lubricant Oil	See Below	50-70	5*	5*
GS-1 /E	Fluorescent Dye	See Below	40-60	NA	NA
	Lubricant Oil	See Below	40-60	5*	5*
GS- 2 /E	Fluorescent Dye	See Below	40-60	NA	NA
	Lubricant Oil	See Below	40-60	5*	5*
GS-3 /E	Fluorescent Dye	See Below	40-60	NA	NA
	Lubricant Oil	See Below	40-60	5*	5*

Lubricant Oil: The specific identity has been withheld as a trade secret. New Jersey Trade Secret Registry Number NJ EIN 80100312-5004P.**Fluorescent Dye:** The specific identity has been withheld as a trade secret. New Jersey Trade Secret Registry Number NJ EIN 80100312-5002P.***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: May cause eye, skin and respiratory system irritation.**Primary Routes of Exposure:** Eye. Skin. Inhalation (breathing).**Eye Contact:** Can cause mild irritation.**Skin Contact:** Irritation can occur following prolonged or repeated contact.**Inhalation (breathing):** Processing vapors can possibly cause irritation to the upper respiratory tract.**Ingestion (swallowing):** Ingestion can cause gastrointestinal irritation.**Aggravation of Existing Conditions:** A review of available data does not identify any worsening of any existing medical conditions.

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

HMIS HAZARD RATING: Health: 1, Fire: 1, 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: >400°F (204°C)**Test Method:** Not tested**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.**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. For large fires: use 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 areas. Keep unnecessary and unprotected personnel from entering area. Eliminate all sources of ignition.**Containment:** Safely stop discharge. Contain material, as necessary, with a dike or barrier. Stop material from contaminating soil, or from entering sewer or bodies of water.**Clean-up/Personal Protection Equipment:** Appropriate safety measures and protective equipment should be used.**Spill Containment and Recovery:** Contain with absorbent material, such as clay, soil or any commercially available absorbent. Shovel reclaimed dye and absorbent into a recovery or salvage drums for disposal.**Disposal:** Dispose of in accordance with applicable local, state and federal regulations.**Reporting:** Spills of this material in excess of a component's RQ must be reported to the National Response Center (1-800-424-8802) and to the appropriate state and local emergency response organizations.**Note:** Product contains no regulated ingredients.

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.**Warning:** Hot organic chemical vapors or mists can suddenly and without warning combust when mixed with air. Ignition can occur at typical elevated temperatures during processing conditions. Any use in such processes should be evaluated thoroughly to ensure safe operating conditions.**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: Amber

Odor: Mild

Physical State: Liquid

Specific Gravity (Water=1): 0.98

Vapor Pressure 68°F (20°C): <0.01 mmHg @ 20°C

Vapor Density (Air=1): >1

Percent Volatile by Volume (%): 0

Evaporation Rate (Butyl Acetate=1): <0.01

Solubility in Water: Not Soluble

pH: Not Applicable

Boiling Range: >400°F (204°C)

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

Section 10. Stability and Reactivity

Chemical Stability: Stable under normal conditions of storage and use

Conditions to Avoid: High temperatures.

Incompatibility with Other Materials: Oxidizers

Hazardous Polymerization: Will not occur

Hazardous Decomposition Products: Combustion may produce carbon monoxide and carbon dioxide.

Section 11. Toxicological Information

No data are available on this product.

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 Regulated

DOT Identification No.: Not Applicable

WHMIS Label: Not Regulated

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).

SARA Title III Information:

Ozone-Depleting Chemicals: No regulated ingredients.

Section 302-Extremely Hazardous Substances: No regulated ingredients.

Section 311/312-Hazard Categories: Fire Hazard: Yes; Sudden Release of Pressure Hazard: No; Reactivity Hazard: No; Immediate (Acute) Health Hazard: Yes; 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 TSNR	% W
Fluorescent Dye	80100312-5002P	See section 2
Lubricant Oil	80100312-5004P	See section 2

California - California Proposition 65 - No regulated ingredients.

CONEG: No data available.

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