

# SPECTRONICS CORPORATION

## MATERIAL SAFETY DATA SHEET

GS/E Series

Effective: 21/06/12

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Supersedes: 11/06/12

### Section 1: Identification

**GHS Product Identifier:** GS-1/E  
GS-2/E  
GS-3/E  
GS-101/E

**Other Names:**

GS-101/E	GS-1/E	GS-2/E	GS-3/E
GS-101/ECS	GS-1/ECS	GS-2/ECS	GS-3/ECS

**Use of Product:** Leak Detection

**Description:** Fluorescent Dye for Air Conditioning and Refrigeration Systems Using Polyolester

**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:** GS-1/E  
GS-2/E  
GS-3/E  
GS-101/E

**Synonyms:** See Section 1 Above

Product	Common Name/Chemical Name	CAS Number	ELINCS	% W
GS-1/E	Polyol Ester Oil Naphthalimide Dye	See Below	See Below	90-95
		See Below	See Below	5-10
GS-2/E	Polyol Ester Oil Naphthalimide Dye	See Below	See Below	85-90
		See Below	See Below	10-15
GS-3/E	Polyol Ester Oil Naphthalimide Dye	See Below	See Below	80-85
		See Below	See Below	15-20

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GS-101/E	Polyol Ester Oil	See Below	See Below	80-85
	Naphthalimide Dye	See Below	See Below	15-20

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**Polyol Ester 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

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#### 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

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**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 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

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#### 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.

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### **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.

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### **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<sup>3</sup>, 8 hr      ACGIH STEL: 10 mg/m<sup>3</sup>      OSHA PEL: 5mg/m<sup>3</sup>, 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.

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### **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:** >400°F (204°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<sub>2</sub>, 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, & ENCS/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	See Section 3 Above
Naphthalimide Dye	80100312-5002P	See Section 3 Above

  
**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**