

# Ritchie Engineering Company, Inc.

## MATERIAL SAFETY DATA SHEET

Fluorescent H<sub>2</sub>O Solution  
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Effective: 11/26/08  
Supersedes: 07/07/06

### Section 1. Identification of the Substance/Preparation and Company

**PRODUCT NAME:** 69584 Fluorescent H<sub>2</sub>O Solution

**DESCRIPTION:** Fluorescent H<sub>2</sub>O Solution for Water-Based Fluid Systems

**USE:** Leak Detection

**EMERGENCY TELEPHONE #:** 800-424-9300 (24 HOURS) CHEMTREC; call collect outside continental U.S.: 703-527-3887.

**PRODUCT INFORMATION:** Ritchie Engineering Company, Inc., 10950 Hampshire Avenue South, Bloomington, MN 55438-2623 U.S.A  
Phone: 952-943-1333, Fax: 1-800-322-8684.

### Section 2. Composition/Information on Ingredients

Common Name/Chemical Name	CAS Number	% W	PEL(mg/m <sup>3</sup> )	TLV(mg/m <sup>3</sup> )
Fluorescent Dye	See Below	5-25	NE	NE
Water, deionized	7732-18-5	75-95	None	None

**Fluorescent Dye:** The specific identity has been withheld as a trade secret. New Jersey Trade Secret Registry Number NJ EIN 80100312-5002P.

### Section 3. Hazards Identification

**EMERGENCY OVERVIEW:** May cause eye, skin and respiratory system irritation.

**Primary Routes of Exposure:** Eye; Skin; Ingestion; Inhalation.

**Eye Contact:** Can cause irritation, however based on animal toxicity testing we consider this product to be nonirritating to the eye (see section 11). **Skin Contact:** Irritation can occur following prolonged or repeated contact, however, based on animal toxicity testing we consider this product to be nonirritating to the skin (see section 11). **Ingestion (swallowing):** Ingestion can cause gastrointestinal irritation, however, based on animal testing we would consider this product to be nontoxic (see section 11). **Inhalation:** May cause respiratory tract irritation resulting in coughing, sore throat and runny nose. **Aggravation of Existing Conditions:** A person with impaired pulmonary function may be more susceptible to the effects of this product.

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

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

### Section 4. First-Aid Measures

**Eye Contact:** Flush eyes with water for 15 minutes. If irritation develops, consult a physician. **Skin Contact:** Wash affected area with soap and water. If irritation develops, consult a physician. **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.

### Section 5. Fire-Fighting Measures

**Flash Point:** >200°F (93.3°C); **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.). **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, or alcohol foam. Use water to cool containers exposed to fire. For large fires, use water spray or fog, thoroughly drenching the burning material; **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

**Spill Containment and Recovery:** Use an absorbent and place contaminated material in a suitable container for disposal. **Disposal Methods:** Disposal must be in accordance with applicable governmental regulations. However, the recommended dilution poses no adverse threat to the environment so that it can be flushed to the sewers.

### 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. Keep from freezing. **Personal Hygiene:** Wash thoroughly after handling, especially before eating, drinking, smoking, or using restroom facilities. **Empty Container Precautions:** Do not reuse empty container for any purpose.

### **Section 8. Exposure Controls/Personal Protection**

**Engineering Controls/Ventilation:** General (dilution) ventilation should be acceptable. **Eye Protection:** Wear safety goggles. An eye wash facility should be readily available. **Skin Protection:** Wear protective clothing and appropriate impervious gloves. **Respiratory Protection:** Avoid breathing vapor and/or mist. If occupational exposure limits are exceeded wear NIOSH/OSHA approved equipment. 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:** Brown; **Odor:** None; **Physical State:** Liquid; **Specific Gravity (Water=1):** ~ 1; **Vapor Pressure 68° F (20° C):** NA; **Vapor Density (Air=1):** NA; **Percent Volatile by Volume (%):** 0; **Evaporation Rate (Butyl Acetate=1):** NA; **Solubility in Water:** 100%; **pH:** 9; **Boiling Range:** > 212° F (100° 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 and reducers; **Hazardous Polymerization:** Will not occur. **Hazardous Decomposition Products:** Combustion may produce carbon monoxide and carbon dioxide.

### **Section 11. Toxicological Information**

Fluorescent Dye*		
Oral LD <sub>50</sub>	Rat	>5,000 mg/kg
Dermal LD <sub>50</sub>	Rabbit	>3,000 mg/kg
Inhalation LC <sub>50</sub>	Rat	>17,600 mg/m <sup>3</sup>
Eye Irritation	Rabbit	Nonirritating
Skin Irritation	Rabbit	Nonirritating

\*Results are based on tests performed on a similar product.

### **Section 12. Ecological Information**

Fluorescent Dye*		
Aquatic Toxicity LC <sub>50</sub> (96h)	Bluegill	>1,000 mg/l
Aquatic Toxicity LC <sub>50</sub> (48h)	Leuciscus idus	>100 mg/l

\*Results are based on tests performed on a similar 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. **Special Instructions:** Be sure to contact the appropriate government environmental agencies if further guidance is required.

### **Section 14. Transport Information**

**DOT Shipping Name:** Liquid ink; **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 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 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: 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:

<b>NAME</b>	<b>CAS No.</b>	<b>%W</b>
Fluorescent Dye	Proprietary	5-25
Water, De-ionized	7732-18-5	75-95

**Canada:** Not Regulated

**California** - California Proposition 65 - 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**