



**sysmex**

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# Material Safety Data Sheet

## RET-SEARCH (II) DYE (RED-800)

Health	Flammability	Reactivity	Contact
2	2	0	1

1 = Slight, 2 = Moderate, 3 = Severe, 4 = Extreme

### 1 PRODUCT IDENTIFICATION

RET-SEARCH (II) DYE™ is contained in a 3x4 inch, soft foil/plastic pouch holding 12 mL (0.4 US fluid ounces). This is packaged in combination with a 1 liter plastic bottle of non-hazardous RET-SEARCH (II) DILUENT (RED-300). The two products are in a cardboard box labeled as RET-SEARCH (II) RED-700A.

RET-SEARCH (II) reagent system is for reticulocyte staining in designated Sysmex Automated Hematology Analyzers. This reagent is to be handled by or appropriately trained laboratory professionals.

### 2 HAZARDOUS INGREDIENTS

	Percent	C.A.S. Number
Ethylene Glycol	92.8%	107-21 -1
Methanol	7.1%	67-56-1

The dye component, which is the active ingredient, is not listed here as a hazardous ingredient as it does not comprise 1% of the mixture, does not present a physical hazard, is not capable of release to exceed permissible exposure limit / threshold limit values, and has not been identified as a carcinogen.

- o **DOT Status** Combustible Liquid, n.o.s. (NA1993) is labeling exempt except for air transport, 49CFR part 173.150 (a).
- o **Toxicity Data Base Summary** This data was obtained in literature for the pure or concentrated compounds. No animal testing was performed with this product
- o **Ethylene Glycol** Oral-man: LDLo, range from 400 mg/kg to 1600 mg/Kg.  
Oral-man: TDLo, 1.2 to 16 g/Kg.  
Oral rat: LD50, 4700 mg/Kg
- o **Methanol** Oral rat: LD50, 5628 mg/kg
- o **Permissible Exposure Level (OSHA) and/or Threshold Limit Values (ACGIH)**

**Ethylene Glycol** Ceiling Limit (CL) vapor/ mist 50 ppm, 127 mg/m<sup>3</sup>

**Methanol** PEL 200 ppm, (Skin) TWA 200 ppm, 262 mg/m<sup>3</sup>, (Skin) STEL 250 ppm 328 mg/m<sup>3</sup>

o **Carcinogen Data Base Summary**

<b>Ethylene Glycol</b>	OSHA: None	NTP: None	IARC: None
<b>Methanol</b>	OSHA: None	NTP: None	IARC: None

**3. PHYSICAL DATA (Based on the major component, Ethylene Glycol)**

Blue color, viscous liquid, faint odor.  
Boiling point 197° C, Vapor pressure 0.06 (20° C), Vapor density 2.1 (Air=1)  
Evaporation Rate 0.01, (Butyl Acetate=1), 100% water soluble.  
Specific Gravity 1.10 at 20-24° C

**4. FIRE AND EXPLOSION DATA**

Consider a combustible liquid. Flash point of ethylene glycol is 112°C (closed container). Do not expose to open flame. Combustion gases produced are carbon monoxide and dioxide.

**5. REACTIVITY DATA**

Stable solution, however ethylene glycol is incompatible with strong oxidizing agents, strong acids, and polymerization catalysts.

**6. TOXICOLOGICAL PROPERTIES & HEALTH HAZARD DATA**

Moderate health hazard rating reflects unusual exposures, via ingestion. This reagent is relatively safe when handled using good chemical hygiene by laboratory professionals, and when enclosed in the analyzer hydraulic system.

Effects of ethylene glycol ingestion occur within minutes to hours post ingestion and include CNS depression and metabolic abnormalities resulting in ethanol-like inebriation, ataxia, slurred speech seizures, coma, cerebral edema, acidosis with tachypnea. With significant doses, 12 to 36 hours post ingestion progressive tachypnea, cyanosis, pulmonary edema. Two to three days post ingestion: renal failure, anuria, uremia and death. Proteinuria and uremia are common effects of toxicity to the liver, and kidney. Inhalation of vapor may occur if solution is heated, symptoms include irritation to throat, headache, backache nausea, vomiting, dizziness, loss of breath and unconsciousness.

Contact will cause skin discoloration and possible irritation. Absorption may occur through skin, prolonged and repeated skin contact may be harmful.

**Wear gloves and lab coat when changing reagent. Wear eye protection if splash is reasonably anticipated. No special ventilation requirements if used as intended. Keep containers closed before and after use on analyzer.**

**7. FIRST AID MEASURES**

- o Ingestion: Obtain medical attention. Dilute by drinking 4 to 8 oz. of water or milk. If vomiting occurs, turn patient on side and keep head lower than hips.
- o Inhalation: Move patient to fresh air. Seek medical advice if necessary.
- o Skin contact: Remove contaminated clothing. Wash affected area with water.
- o Eye Contact: Promptly wash eyes with water, lifting lower and upper lids until all traces of irritation is removed. Seek medical advice if irritation persists.

**8. PREVENTIVE MEASURES AND DISPOSAL PROCEDURES**

Wear gloves, safety glasses or goggles and a lab coat. Dike, contain and absorb the spill with neutral absorbent material, place in a container for disposal. Dispose of waste in accordance with applicable local, state and federal environmental regulations.

**9. STORAGE AND SPECIAL INFORMATION**

Store at controlled room temperature (max . 2-35 °C) to ensure reagent performance.

**10. REGULATORY INFORMATION****International Inventory Status:**

Ingredient	CAS #	EC	Japan	Australia	Korea	Canada: DSL	Canada: NDSL
Ethylene Glycol	107-21 -1	YES	YES	YES	YES	YES	NO
Methanol	67-56-1	YES	YES	YES	YES	YES	NO

**United States:**

Ingredient	CAS #	OSHA	CAA	CWA	RCRA	SARA 302	SARA 313	TSCA
Ethylene Glycol	107-21 -1	YES	YES	YES	YES	YES	YES	YES
Methanol	67-56-1	YES	YES	YES	YES	NO	YES	NO

**WHMIS (Canada):****HAZARDOUS INGREDIENTS – WHMIS (Canadian Workplace Hazardous Materials Information System)**

This product when tested as a whole is considered a controlled substance, Class D, Division 2, Subdivision A (VERY TOXIC) within the meaning of the Hazardous Products Act.

This MSDS has been prepared according to the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all of the information required by CPR.

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