



24-HOUR EMERGENCY PHONE NUMBER

Contact CHEM-TEL at 1-800-255-3924
Sysmex's CHEM-TEL # MIS0004042

Material Safety Data Sheet

STROMATOLYSER-4DS DYE (FFS-800)

Health	Flammability	Reactivity	Contact
1	1	0	1

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

1. PRODUCT IDENTIFICATION

STROMATOLYSER-4DS™ reagent is contained in a 3x4 inch, soft foil/plastic pouch holding 42 mL (1.4 U.S. fluid ounces). Three of these packages are placed in each box for a total of 126 mL (4.2 U.S. fluid ounces) and this configuration is labeled as STROMATOLYSER-4DS (FFS-800A).

This reagent is for use with designated Sysmex Automated Hematology Analyzers. This reagent is to be handled by laboratory professionals or appropriately trained personnel.

Synonyms: Nucleated cell stain: Fluorochochrome Dye

2. HAZARDOUS INGREDIENTS

	Percent	C.A.S. Number
Ethylene Glycol	96.9%	107-21-1
Methanol	3.0%	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.

○ **DOT Status:**

Combustible Liquid, n.o.s. (NA1993) is labeling exempt except for air transport, 49CFR part 173.150 (a).

○ **Toxicity Data Base Summary:**

This data was obtained in literature for the pure or concentrated compounds. No animal testing was performed with this product

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

Methanol: Oral Rat LD₅₀, 5628 mg/Kg



- **Permissible Exposure Level (OSHA) and/or Threshold Limit Values (ACGIH):**
Ethylene Glycol: Ceiling Limit (CL) vapor/ mist 50 ppm, 127 mg/m³
Methanol: 200 ppm, (Skin) TWA 200 ppm, 262 mg/m³, (Skin) STEL 250 ppm 328 mg/m³
- **Carcinogen Data Base Summary:**

	OSHA	NTP	IARC
<u>Ethylene Glycol</u>	None	None	None
<u>Methanol</u>	None	None	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

Considered 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.

Systemex America, Inc. provides the information contained herein in good faith, but makes no representative claim or warranty as to its completeness or accuracy. This document is intended only as a guide for appropriate handling of the material described by properly trained persons using the product according to its intended purposes. Individuals receiving this information retain the responsibility for determining the suitability of the information for any specific purpose. Users should consider these data only as supplement to other information gathered by themselves and must make independent determinations of the suitability and completeness of information from all sources to ensure proper use and disposal of these materials and for the safety and health of employees and customers. No warranty, expressed or implied, is made with regard to such information.

Permission is granted to make unlimited paper copies of this MSDS for internal purposes only.