



MSDS – CytoLyt® Solution

1. CHEMICAL AND COMPANY IDENTIFICATION

Product Identification: CytoLyt® Solution

Trade Name/Chemical Family/Synonyms: Methanol-water solution

Product Description: A methanol based, buffered preservative solution

Product Use: A preservative solution to support cells during transport and slide preparation.

Manufacturer Cytoc Corporation
250 Campus Drive
Marlborough, Massachusetts 01752
USA
Telephone: 800-442-9892

EMERGENCY TELEPHONE NUMBERS: **For Health/Transportation/Chemical Spills**
(24 hours a day and 7 days a week) **(Multilingual capabilities and free calls accepted)**
Continental United States: (800) 424-9300
Outside of continental United States: +(703) 527-3887

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2. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS Registry #	Wt. %
Methanol	67-56-1	20 – 50
Water	7732-18-5	40 – 70

3. HAZARDS IDENTIFICATION:

EMERGENCY OVERVIEW: Material is a clear flammable liquid. Inhalation of vapors may cause nonspecific discomfort (nausea, weakness), drowsiness with anesthetic effects and possible blindness. Swallowing as little as 10 ounces (296 ml) may cause blindness and in extreme cases death.

Potential Health Effects.

Inhalation: May cause depression of central nervous system resulting in nausea, weakness, drowsiness and possibly blindness.

Eye Contact: May cause transient irritation.

Skin Contact: May cause irritation and/or dermatitis. Material may be absorbed through the skin resulting in effects similar to ingestion or inhalation.

Ingestion: May cause intoxication, Central nervous system depression, nausea, and dizziness. May damage liver, kidneys and nervous system. May cause blindness and/or death.

Target Organs: Liver, kidneys, and central nervous system.

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Medical Conditions Aggravated by Exposure: Individuals with preexisting diseases of the retina (eyes) or liver may have increased susceptibility to toxicity at lower levels of successive exposure (repeated exposures).

Chronic: Liquid and vapor can penetrate skin and mucous membranes. May cause chronic liver, kidney or nervous system disorders.

4. FIRST AID MEASURES:

Inhalation: Remove patient to fresh air. If symptoms of intoxication or vision problems are apparent, get immediate medical aid.

Eye Contact: Immediately flush with clean water for at least 15 minutes. Get medical aid.

Skin Contact: Remove contaminated clothing and shoes. Flush affected area with copious amounts of water. If irritation or other symptoms are present, get immediate medical assistance.

Ingestion: **Do Not Induce Vomiting.** Give one or two glasses of water and get immediate medical aid.

Notes to Physician: Treat for CNS depression and possible renal failure.

5. FIRE FIGHTING MEASURES:

Flashpoint and Method: 109°F (42.7°C) Closed cup

Autoignition Temperature: 725°F (385°C) (based on methanol component)

Flammable Limits: LEL-6.7 UEL-36 (based on methanol component)

General Hazard: Flammable material. Heated material may form toxic and/or explosive vapors.

Fire Fighting Instructions: Wear full turnout gear with self-contained breathing apparatus. If material is not involved in fire, attempt to cool with water or remove from area. **FLAME INVISIBLE IN DAYLIGHT.**

Fire Fighting Equipment: Wear full turnout gear with self-contained breathing apparatus.

Extinguishing Media: Foam – Yes Alcohol Foam – Yes CO2 – Yes Dry Chemical – Yes
Water – Yes Other – Water Fog

Hazardous Combustion Products: Carbon Monoxide and Carbon Dioxide

NFPA Hazard Rating: Health – 1 0=Insignificant
(National Fire Protection Association) Flammability – 2 1=Slight
Reactivity – 0 2=Moderate
Special Information – None 3=High
4=Extreme
U=Unknown * =No Information

Special Information: None

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6. ACCIDENTAL RELEASE MEASURES:

Land Spill Prevent runoff from entering waterways. Dyke large spills with clay. Absorb small spills with clay or kitty litter. For spills in excess of 50 gallons, contact licensed HAZWOPER responders.

Water Spill: Follow local, state and Federal guidelines and regulations.

Follow Local, State and Federal Guidelines for all spills.

7. HANDLING AND STORAGE:

Handling: KEEP OUT OF THE REACH OF CHILDREN. Wear recommended personal protective equipment and avoid contact with skin and eyes.

Storage: Store away from excessive heat and sources of ignition. Keep containers closed and protect from damage. Storage Temperatures: Without cytologic sample: 59 – 86 °F (15 – 30°C)

8. EXPOSURE CONTROLS / PERSONAL PROTECTIVE EQUIPMENT:

Engineering Controls: Supply exhaust and/or ventilation to keep vapor levels below threshold limit value.

Respirator: Where engineering controls are not adequate, use approved NIOSH respirators or supplied air respirators.

Protective Clothing: Chemically resistant gloves and eye protection.

Exposure Limits for Ingredients:

Ingredient	OSHA PEL	ACGIH TLV [®]
Methanol	200 ppm – TWA	200 ppm – TWA 250 ppm – STEL Skin
TWA – 8 hr STEL – 15 minute		

9. PHYSICAL AND CHEMICAL PROPERTIES:

Vapor Pressure mm/Hg: 127

Specific Gravity (Water=1): 0.97

Solubility in Water: complete

Freezing Point (°F/°C): not established.

Evaporation Rate (BuAc=1): > 1

Viscosity: Not determined

Boiling Point (°F/°C): 148/64.4

Appearance: clear, thin

Physical State: liquid

Vapor Density (Air=1): 1.1

Percent Volatile by Volume: > 99

pH: Not applicable

Odor: Alcohol type odor

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10. STABILITY AND REACTIVITY:

General Stability: Stable

Incompatible Materials And Conditions To Avoid: Strong oxidizers. (May ignite product)

Hazardous Decomposition Products: Carbon monoxide and carbon dioxide

Hazardous Polymerization: Will not occur.

11. TOXICOLOGICAL INFORMATION:

For methanol: Product Inhalation LC50 Rat: 64000 ppm/4H
not tested as a mixture: Oral LD50 Rat: 5628 mg/kg
Oral LD50 Mouse: 7300 mg/kg
Dermal LD50 Rabbit: 15800 mg/kg

12. ECOLOGICAL INFORMATION:

Material has very low aquatic toxicity.

LC₅₀ Pimephales promelas (fathead minnows) 29.4 g/l/96 hr, (28-29 days old)

EC50 (30 min) Photobacterium phosphoreum: 51,000-320,000 mg/L:

13. DISPOSAL CONSIDERATION:

RCRA Hazardous Waste if Discarded? Yes. If so, RCRA ID number: D001, Ignitable waste.

14. TRANSPORTATION INFORMATION: DOT (Department of Transportation)

US DOT

Proper Shipping Name:	Flammable liquids, n.o.s. (Methanol)
Hazard Class:	3
Identification Number:	UN1993
Packing Group:	III

15. REGULATORY INFORMATION:

TSCA (Toxic Substances Control Act): All ingredients listed on TSCA inventory.

CERCLA: RQ for methanol – 5,000 lbs. (2,268 kg) No TPQ established for methanol

SARA 311 Status: Immediate, fire hazard

SARA 313: Methanol is listed on the 313 Toxic Pollutant reporting list.

State Issues: Not listed for California Proposition 65

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Foreign Chemical Inventories: All ingredients are listed on the chemical inventories of the following countries:
Canada (DSL)
Japan
European Union
Australia

WHMIS Status (Canada): A controlled product. Classification: B2; D1B; D2A
This product has been classified in accordance with hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

16. OTHER INFORMATION:

Current Issue Date: April, 2008
Previous Issue Date: February, 2005
Changes to MSDS: Corrected CAS number for Water
Other Information: None

Information Note: Where no corresponding data was contained in manufacturer's MSDS, additional research is required and available upon request. THE INFORMATION RELATES TO THIS SPECIFIC MATERIAL. IT MAY NOT BE VALID FOR THIS MATERIAL IF USED IN COMBINATION WITH ANY OTHER MATERIALS OR IN ANY PROCESS. IT IS THE USER'S RESPONSIBILITY TO SATISFY ONESELF AS TO THE SUITABILITY AND COMPLETENESS OF THIS INFORMATION FOR HIS OR HER OWN PARTICULAR USE.