



# 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:** Cytyc Corporation  
85 Swanson Road  
Boxborough, Massachusetts 01719  
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

## 2. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS Registry #	Wt. %
Methanol	67-56-1	20 – 50
Water	7782-13-5	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:

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**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:

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**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    CO<sub>2</sub> – 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 <sup>®</sup>
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:

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**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:

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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:

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Material has very low aquatic toxicity.

LC<sub>50</sub> 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:

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

## 14. TRANSPORTATION INFORMATION: DOT (Department of Transportation)

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### US DOT

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

## 15. REGULATORY INFORMATION:

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**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:

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**Current Issue Date:** July, 2002

**Previous Issue Date:** October, 2001

**Changes to MSDS:** New format and revision of text to improve clarity. Addition of non-US exposure values.

**Other Information:** None

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**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.