HOLOGIC™	ThinPrep® Stain EA Solution Material Safety Data Sheet (MSDS)

1. CHEMICAL AND COMPANY IDENTIFICATION

Product Identification: ThinPrep® Stain EA Solution

Trade Name/Chemical Family/Synonyms: ThinPrep® Stain EA Solution

Product Description: An alcoholic dye solution of proprietary dyes.

Product Use: The staining of cytological slide specimens.

Manufacturer:
Hologic Inc.
250 Campus Drive
Marlborough, Massachusetts 01752
USA
Telephone: 800-442-9892

EMERGENCY TELEPHONE NUMBERS:
(24 hours a day and 7 days a week)

For Health/Transportation/Chemical Spills
(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

Chemical	CAS Registry #	Wt. %
Ethanol	64-17-5	Prop.
Isopropanol	67-63-0	Prop.
Methanol	67-56-1	Prop.
Propriety Dye Blend	Not established	<1.0

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW: **Material is both flammable and toxic. Inhalation will cause nonspecific discomfort (nausea, weakness), and/or temporary CNS depression with anesthetic effects. Overexposure may cause liver damage and/or death.**

Potential Health Effects:

Inhalation: May cause depression, nausea, weakness, and anesthetic effects.

Eye Contact: May cause irritation.

Skin Contact: May cause irritation.

Ingestion: May cause intoxication, central nervous system depression, nausea, and dizziness. May damage liver, kidneys and nervous system.

Target Organs: Liver, skin, eyes, respiratory and central nervous system.

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: May cause chronic liver 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 unless directed to do so by medical personnel**. Give one or two glasses of water and get immediate medical assistance.

Notes to Physician: Treat for CNS depression. Ethanol is the predominant alcohol.

5. FIRE FIGHTING MEASURES

Flammability:
Flash point: 56°F (14°C) (closed cup)(based on ethanol component)
Auto ignition temperature: 685°F (363°C) (based on ethanol component)
Flammable limits: LEL = 19 UEL = 3.3 (based on ethanol component)
Flammable liquid and vapor.

Explosion Data: Above flash point, vapor air mixtures are explosive within flammable limits noted above. Moderate explosion hazard and dangerous fire hazard when exposed to heat, sparks or flames. Sensitive to static discharge.

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

Fire Fighting Instructions: Wear full turnout gear with NIOSH approved self-contained breathing apparatus with full face piece operated in the pressure demand or other positive pressure mode. 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 NIOSH approved self-contained breathing apparatus with full face piece operated in the pressure demand or other positive pressure mode.

Extinguishing Media: Use dry chemical, alcohol foam, water, or carbon dioxide.

Hazardous Combustion Products: Carbon Monoxide and Carbon Dioxide

NFPA Hazard Rating: (National Fire Protection Association)
Health – 1
Flammability – 3
Reactivity – 0
Special Information – None

0=Insignificant
1=Slight
2=Moderate
3=High
4=Extreme
U=Unknown *=No Information

Special Information: None

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions: Immediately contact emergency personnel. Keep unnecessary personnel away. Ventilate area of leak or spill. Remove all sources of ignition. Use suitable protective equipment (Section 8). Isolate hazard area.

Environmental Precautions: Avoid dispersal of spilled material, runoff and contact with soil, waterways, drains and sewers. Dyke large spills with absorbent with an inert material (e.g., vermiculite, dry sand, earth). Absorb small spills with clay or kitty litter. For spills in excess of 50 gallons, contact licensed HAZWOPER responders.

Methods for Containment: Contain and recover liquid when possible. Use non-sparking tools and equipment. Collect liquid in an appropriate container or absorb with an inert material (e.g., vermiculite, dry sand, earth).

Methods for Clean-Up: Scoop up with non-sparking tools and equipment then place into a suitable container for disposal.

Other Information: Follow local, state, provincial and federal guidelines for all spills.

7. HANDLING AND STORAGE

Handling: KEEP OUT OF THE REACH OF CHILDREN. Avoid contact with eyes, skin and clothing. Keep container closed. Wear recommended personal protective equipment. Avoid contact with heat, sparks and flame. Do not ingest or inhale. Wash thoroughly after handling.

Storage: Store away from excessive heat and sources of ignition. Keep container closed and protect from damage.
Storage temperature: 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.

Personal Protective Equipment:
Eye/Face Protection: Wear safety glasses with side shields.
Hand Protection: Wear chemical resistant gloves.
Skin and Body Protection: Wear suitable protective clothing.
Respiratory Protection: Where engineering controls are not adequate, use approved NIOSH respirators or supplied air respirators.

Exposure limit values:

Ingredient	OSHA PEL	ACGIH TLV®	
Ethanol	1000 ppm – TWA	1000 ppm – TWA	
	Canada – Alberta, British Columbia, New Brunswick, Manitoba, Ontario, Quebec, and Yukon		**Canada – Saskatchewan**
TWA – 8 hr STEL – 15 minute	1000 ppm – TWA 1250 ppm – STEL (Alberta only)		1880 mg/m^3 TWA 2350 mg/m^3 STEL

Ingredient	OSHA PEL	ACGIH TLV®	
Isopropanol	400 ppm – TWA	400 ppm – TWA 500 ppm- STEL	
	Canada – Alberta, British Columbia, New Brunswick, Manitoba, Ontario, Quebec, and Yukon		**Canada – Saskatchewan**
TWA – 8 hr STEL – 15 minute	400 ppm – TWA 500 ppm – STEL		983 mg/m^3 TWA 1230 mg/m^3 STEL

Ingredient	OSHA PEL	ACGIH TLV®	
Methanol	200 ppm – TWA	200 ppm – TWA 250 ppm – STEL Skin	

TWA – 8 hr STEL – 15 minute	**Canada – Alberta, British Columbia, New Brunswick, Manitoba, Ontario, Quebec, and Yukon**	**Canada – Saskatchewan**
	200 ppm – TWA 250 ppm – STEL Skin	262 mg/m^3 TWA 328 mg/m^3 STEL

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Greenish red; opaque
Odor: Alcohol type odor
Specific Gravity (Water=1): 0.81
Solubility in Water: Complete
Freezing Point (°F/°C): Not available
Evaporation Rate: Not available
Viscosity: Not available
Lower Flammability Limit: Not available
Coefficient of Water/Oil Distribution: Not available

Color: Greenish red
Physical State: Liquid
VOC Content, wt.%: Not available
Vapor Density (Air=1): 1.6
Vapor Pressure mm/Hg: 44.6
pH: 5.5
Boiling Point (°F/°C): 173°F (78.5°C)
Upper Flammability Limit: Not available
Auto-ignition Temperature: Not available

10. STABILITY AND REACTIVITY

General Stability:	Stable under normal temperatures and pressures.
Conditions To Avoid:	High temperatures, incompatible materials, ignition sources, oxidizers.
Incompatible Materials:	Strong oxidizers (may ignite product).
Hazardous Decomposition Products:	May form carbon dioxide and carbon monoxide.
Hazardous Polymerization:	Will not occur.

11. TOXICOLOGICAL INFORMATION

For Ethanol: Product not tested as a mixture

Inhalation:	LC50 Rat: 20000 ppm/10H
Oral:	LD50 Rat: 7060 mg/kg LD50 Mouse: 3450 mg/kg

12. ECOLOGICAL INFORMATION

Ecotoxicity:	For Ethanol: This material has very low aquatic toxicity. Fish: LC50 (96 hr) Pimephales promelas (fathead minnows): 14200 mg/L EC50 (30 min) Photobacterium phosphoreum: 34634 mg/L
Persistence / Degradability:	No data available.
Bioaccumulation / Accumulation:	No data available.
Mobility in Environment:	No data available.

13. DISPOSAL CONSIDERATION

Disposal Instructions: Dispose of container and unused contents in accordance with local, state, provincial, and federal laws.

RCRA Hazardous Waste if Discarded? Yes

RCRA ID number: D001, Ignitable waste.

14. TRANSPORTATION INFORMATION

Regulatory Information	UN number	Proper shipping name	Class	Packing group
US DOT Classification	1993	Flammable liquids, n.o.s. (ethanol, methanol)	3	II

15. REGULATORY INFORMATION

USA: The MSDS was prepared pursuant to the Hazardous Communication Standard (29 CFR 1910.1200).

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

CERCLA: Reportable Quantity (RQ) for methanol- 5,000 pounds (2270 kg). No Threshold Planning Quantity (TPQ) established for methanol.

SARA 311 Status: Immediate, fire hazard

SARA 313: Methanol is listed on the 313 Toxic Pollutant reporting list. Maximum concentration in this product is 4.5%.

State Issues: Not listed for California Proposition 65

WHMIS Status (Canada): A controlled product. Classification: B2;D1B;D2A, D2B
This MSDS has been prepared according to the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

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

16. OTHER INFORMATION

Current Issue Date: March, 2010

Previous Issue Date: Initial Hologic

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.