

1. CHEMICAL AND COMPANY IDENTIFICATION

Product Identification: ThinPrep® Stain Nuclear Stain
Trade Name/Chemical Family/Synonyms: ThinPrep® Stain Nuclear Stain
Product Description: An aqueous staining solution.
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: 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

Chemical	CAS Registry #	Wt. %
Acetic Acid	64-19-7	Prop.
Aluminum Sulfate	17927-65-0	Prop.
Ethylene Glycol	107-21-1	Prop.
Hematoxylin (CI 75290)	517-28-2	Prop.
Sodium Iodate	7681-55-2	Prop.

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW: Irritant to eyes and skin. Toxic by ingestion or skin absorption. Not likely to pose inhalation threat under normal conditions of use.

Potential Health Effects:

Inhalation: No effects are anticipated with normal conditions of use. However, see "Chronic effects".
Eye Contact: May cause irritation.
Skin Contact: Prolonged or repeated contact results in skin irritation and internal target organ effects (see "Chronic effects" below).
Ingestion: Toxic by ingestion.
Target Organs: Kidney, liver, blood or central nervous system.
Medical Conditions Aggravated by Exposure: Individuals with preexisting diseases of the kidney, liver, blood or central nervous system may have increased susceptibility to toxicity at lower levels of successive exposure (repeated exposures).
Chronic: Prolonged or repeated overexposure to vapors may have toxic effects on kidney, liver, blood or central nervous system.

4. FIRST AID MEASURES

Inhalation:	Remove patient to fresh air. If symptoms of coughing, difficulty in breathing or depression of central nervous system is experienced, 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:	The concentration of acetic acid is considerably less than that found in household vinegar.

5. FIRE FIGHTING MEASURES

Flammability:	Not applicable – Not combustible.	
Explosion Data:	Not applicable.	
General Hazard:	Not applicable- Not combustible.	
Fire Fighting Instructions:	No special instructions required.	
Fire Fighting Equipment:	No special equipment required.	
Extinguishing Media:	Use dry chemical, alcohol foam, water, water fog or carbon dioxide.	
Hazardous Combustion Products:	None	
NFPA Hazard Rating: (National Fire Protection Association)	Health – 1 Flammability – 0 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:	Keep unnecessary personnel away. 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. Collect liquid in an appropriate container or absorb with an inert material (e.g., vermiculite, dry sand, earth).
Methods for Clean-Up:	Scoop up 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. Wear recommended personal protective equipment and avoid contact with skin and eyes. Do not ingest or inhale. Wash thoroughly after handling.

Storage: Store away from excessive heat and sources of ignition. Do not store in direct sunlight. Keep containers closed and protect from damage.
Storage Temperatures: 59 – 86 °F (15 – 30°C). Do not mix with oxidizers.

8. EXPOSURE CONTROLS / PERSONAL PROTECTIVE EQUIPMENT

Engineering Controls: General room ventilation is adequate when handling normally anticipated volumes in a laboratory setting.

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: Respirators are not needed when handling normally anticipated volumes in a laboratory setting.

Exposure limit values:

Ingredient	OSHA PEL	ACGIH TLV®	Canada – Yukon
Acetic Acid TWA – 8 hr STEL – 15 minute	10 ppm – TWA	10 ppm – TWA	10 ppm – TWA 25 ppm - STEL
	Canada – Alberta, British Columbia, New Brunswick, Manitoba, Ontario, and Quebec.		Canada – Saskatchewan
	10 ppm – TWA 15 ppm – STEL (Alberta only)		25 mg/m ³ TWA 37 mg/m ³ STEL
Aluminum Sulfate TWA – 8 hr STEL – 15 minute	Not known	Not known	Not known
	Canada – Alberta, British Columbia, New Brunswick, Manitoba, Ontario, and Quebec		Canada – Saskatchewan
	Not known		Not known
Ethylene Glycol TWA – 8 hr STEL – 15 minute	None	10 ppm – TWA 15 ppm – STEL 100 mg/ m ³ – STEL (aerosol only)	10 mg/ m ³ – TWA (particulate) 250 mg/ m ³ – Vapour 10 ppm – STEL
	Canada – Alberta, British Columbia, New Brunswick, Manitoba, Ontario, and Quebec.		Canada – British Columbia
	127 mg/ m ³ – Ceiling		10 mg/ m ³ – TWA 20 mg/ m ³ – STEL 127 mg/ m ³ – Ceiling Skin
Hematoxylin	None	None	None
	Canada – Alberta, British Columbia, New Brunswick, Manitoba, Ontario, and Quebec.		Canada – British Columbia
	None		None

Ingredient	OSHA PEL	ACGIH TLV®	Canada – Yukon
Sodium Iodate	None	None	None
	Canada – Alberta, British Columbia, New Brunswick, Manitoba, Ontario, and Quebec.		Canada – British Columbia
	None		None

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Opaque	Color: Red to purple
Odor: Faint vinegar odor	Physical State: Liquid
Specific Gravity (Water=1): 1.05	VOC Content, wt. %: Not available
Solubility in Water: Complete	Vapor Density (Air=1): Not available
Freezing Point (F/C): 32 F (0 C)	Vapor Pressure mm/Hg: Not available
Evaporation Rate: Not available	pH: 2.5
Viscosity: Not available	Boiling Point (F/C): 212 F (100 C)
Lower Flammability Limit: Not available	Upper Flammability Limit: Not available
Coefficient of Water/Oil Distribution: Not available	Auto-ignition Temperature: Not available

10. STABILITY AND REACTIVITY

General Stability:	Stable
Conditions To Avoid:	Strong oxidizers.
Incompatible Materials:	Strong oxidizers.
Hazardous Decomposition Products:	None
Hazardous Polymerization:	Will not occur.

11. TOXICOLOGICAL INFORMATION

The ingredients are generally considered to be harmless in the concentrations present in this product through normally anticipated routes of exposure.

Ethylene glycol may be absorbed through the skin if exposure is massive and prolonged, leading to target organ effects.

None of the ingredients of this product is listed by the International Agency for Research on Cancer (IARC), or by the National Toxicological Program's (NTP) *Report on Carcinogens*, and none is regulated by OSHA as a carcinogen.

12. ECOLOGICAL INFORMATION

Ecotoxicity:	Toxicity threshold (cell multiplication inhibition test) for bacteria, algae and protozoan > 10,000 mg/l. LD ₅₀ in goldfish: >5,000 mg/l (24hr) LC ₅₀ in guppies: >49,000 ppm (7 days)
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.
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RCRA Hazardous
Waste If Discarded? No**14. TRANSPORTATION INFORMATION**

Regulatory Information	UN number	Proper shipping name	Class	Packing group
US DOT Classification	N/A	Non-hazardous	N/A	N/A

15. REGULATORY INFORMATION

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

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

CERCLA: Reportable Quantity (RQ) for ethylene glycol- 5000 lbs (2270 kg). No threshold planning quantity (TPQ) established for ethylene glycol.

SARA 311 Status: Ethylene glycol is listed on the 311 list when > 30%.

SARA 313: Ethylene glycol is listed on the 313 list when > 30%.

State Issues: Not listed for California Proposition 65

WHMIS Status (Canada): The ingredients are generally considered to be harmless in the concentrations present in this product through normally anticipated routes of exposure. D2B (Aluminum sulfate), and E; D2A; B3 (Acetic acid). 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.