



Safety Data Sheet

ThinPrep® Nuclear Stain Solution

SECTION 1: Identification of the substance/preparation and of the Company/undertaking

Product Identifier

Product Name ThinPrep® Nuclear Stain Solution

Recommended use of the chemical and restrictions on use

Specific use(s) An aqueous staining solution used for the staining of cytological slide specimens

Recommended Use In vitro diagnostic

Details of the supplier of the safety data sheet

Manufacturer Hologic Inc.
250 Campus Drive
Marlborough, MA 01752
United States
1-508-263-2900

Distributor Hologic Canada Limited
130 Spadina Avenue, Suite 401
Toronto, ON, M5V-2L4
Canada
1-877-209-7192

24 Hour Emergency Phone Number Chemtrec, U.S. and Canada 1-800-424-9300; Chemtrec International +1-703-527-3887

For further information, please contact: sds@hologic.com

SECTION 2: Hazards identification

Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200).

Acute toxicity - Oral

Category 4

Emergency Overview

Label Elements



Signal word

Warning

Hazard Statements

H302 - Harmful if swallowed

Precautionary Statements - Prevention

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P264 - Wash face, hands and any exposed skin thoroughly after handling
P270 - Do not eat, drink or smoke when using this product

ERG Code

P301 + P312 - IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell

Precautionary Statements - Disposal

P501 - Dispose of contents/container in accordance with local/regional/national/international regulation.

Hazards not otherwise classified (HNOC)

Not applicable

Unknown Acute Toxicity

1.5% of the mixture consists of ingredient(s) of unknown toxicity

SECTION 3: Composition/information on ingredients

Substances

Not applicable

Mixtures

Mixtures

OSHA Hazard Classification

This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Chemical nature

Aqueous solution of organic and inorganic salts.

Component name	CAS No	%
Ethylene glycol	107-21-1	18% - 28%

SECTION 4: First aid measures

First aid measures

General advice

If symptoms persist, call a physician. Do not breathe dust/fume/gas/mist/vapors/spray. Do not get in eyes, on skin, or on clothing.

Eye contact

Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Keep eye wide open while rinsing. If symptoms persist, call a physician.

Skin Contact

Consult a physician if necessary. Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes.

Inhalation

Remove to fresh air. Call a physician. If breathing is irregular or stopped, administer artificial respiration. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation.

Ingestion

Rinse mouth. Drink plenty of water. If symptoms persist, call a physician. Do NOT induce vomiting.

Self-protection of the first aider

Use personal protective equipment as required.

Symptoms

Treat symptomatically.

Indication of any immediate medical attention and special treatment needed

Note to physicians

Treat symptomatically.

SECTION 5: Firefighting measures

Flammability	Not flammable.
Suitable Extinguishing Media	Use extinguishing agent suitable for type of surrounding fire.
Protective equipment and precautions for firefighters	As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures

Personal precautions	Use personal protective equipment as required. Ensure adequate ventilation, especially in confined areas.
Environmental precautions	Prevent entry into waterways, sewers, basements or confined areas. Do not flush into surface water or sanitary sewer system.

Methods and material for containment and cleaning up

Methods for containment	Cover with absorbent or contain.
Methods for cleaning up	Cover liquid spill with sand, earth or other non-combustible absorbent material. Cover powder spill with plastic sheet or tarp to minimize spreading. Pick up and transfer to properly labeled containers.

SECTION 7: Handling and storage

Precautions for safe handling	Avoid prolonged contact with eyes, skin, and clothing. No known effects under normal use conditions.
Advice on safe handling	Avoid contact with skin, eyes or clothing. Use personal protective equipment as required. Wash contaminated clothing before reuse. Do not breathe dust/fume/gas/mist/vapors/spray. Do not eat, drink or smoke when using this product.
Conditions for safe storage, including any incompatibilities	
Storage	Store in accordance with local regulations. Use appropriate containment to avoid environmental contamination.
Storage Conditions	Store in accordance with local regulations. Keep container tightly closed in a dry and well-ventilated place. Keep out of the reach of children.

SECTION 8: Exposure Controls/Personal Protection.

Exposure Guidelines

United States of America

Component name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Ethylene glycol 107-21-1	STEL: 50 ppm vapor fraction STEL: 10 mg/m ³ inhalable particulate matter, aerosol only TWA: 25 ppm vapor fraction	(vacated) Ceiling: 50 ppm (vacated) Ceiling: 125 mg/m ³	-
Aluminum Sulfate 10043-01-3	-	(vacated) TWA: 2 mg/m ³ Al Aluminum	TWA: 2 mg/m ³ Al

Canada

Component name	British Columbia OEL	Quebec OEL	Ontario TWA
Ethylene glycol 107-21-1	TWA: 10 mg/m ³ STEL: 20 mg/m ³ Ceiling: 100 mg/m ³ Ceiling: 50 ppm	Ceiling: 50 ppm Ceiling: 127 mg/m ³	CEV: 100 mg/m ³

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Aluminum Sulfate 10043-01-3	-	TWA: 2 mg/m ³	-
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Mexico

Component	Carcinogenicity	Exposure Limits
Ethylene glycol 107-21-1 (18% - 28%)	-	Mexico: Ceiling 100 mg/m ³

NIOSH IDLH *Immediately Dangerous to Life or Health*

Appropriate engineering controls

Engineering Controls Provide adequate ventilation. Showers. Eyewash stations.

Individual protection measures, such as personal protective equipment

- Eye/face protection** Wear safety glasses with side shields (or goggles).
- Skin and body protection** Wear suitable protective clothing.
- Hand Protection** Wear protective nitrile rubber gloves.
- Respiratory protection** Not applicable

General Hygiene Considerations Do not eat, drink or smoke when using this product. Handle in accordance with good industrial hygiene and safety practice.

Other Information

Environmental exposure controls Do not allow into any sewer, on the ground or into any body of water.

SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

- Physical State @20°C** Liquid
- Appearance** Liquid
- Color** Red to violet
- Odor** Mild vinegar
- Odor threshold** No information available

<u>Property</u>	<u>Values</u>
pH	2.5
Melting point/freezing point	-14.4 °C / 6.1 °F
Boiling point / boiling range	104.4 °C / 220 °F
Flash point	
Method	No information available
Evaporation rate	No information available
Flammability (solid, gas)	No information available
Flammability Limits in Air	
Upper flammability limits	No information available
Lower flammability limit	No information available
Vapor pressure	No information available
Vapor density	1.59 (Air=1)
Relative density	
Specific Gravity	1.05
Water solubility	
Solubility(ies)	
Partition coefficient	No information available
Autoignition temperature	424 °C / 795 °F
Decomposition temperature	No information available
Viscosity	No information available
Explosive properties	No information available
Oxidizing properties	No information available

SECTION 10: Stability and reactivity

Reactivity None under normal use conditions.

Stability	Stable under normal conditions.
Possibility of Hazardous Reactions	None under normal use conditions.
Hazardous polymerization	None under normal use conditions.
Conditions to avoid	None under normal use conditions.
Incompatible materials	None under normal use conditions.
Hazardous Decomposition Products	None under normal use conditions.
Materials to avoid	None under normal use conditions.

SECTION 11: Toxicological information

Information on likely routes of exposure

Product Information	Product does not present an acute toxicity hazard based on known or supplied information.
Inhalation	None under normal use conditions.
Eye contact	May cause irritation.
Skin Contact	None under normal use conditions.
Ingestion	None under normal use conditions.

Component name	LD50/oral/rat - (mg/kg)	LD50/dermal/rat - (mg/kg)	Inhalation LC50
Ethylene glycol 107-21-1	= 4700 mg/kg (Rat)	= 10600 mg/kg (Rat)	-
Aluminum Sulfate 10043-01-3	= 1930 mg/kg (Rat)	-	-

Information on toxicological effects

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritation	No information available.
Serious eye damage/eye irritation	No information available.
Sensitization	No information available.
Germ cell mutagenicity	No information available.
Carcinogenicity	No information available.

Reproductive toxicity	No information available.
STOT - single exposure	No information available.
STOT - repeated exposure	No information available.

Target Organ Effects Central nervous system, Eyes, Respiratory system, Skin.

Aspiration hazard	No information available.
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Numerical measures of toxicity - Product Information

Unknown Acute Toxicity 1.5% of the mixture consists of ingredient(s) of unknown toxicity

The following values are calculated based on chapter 3.1 of the GHS document . mg/kg mg/l

SECTION 12: Ecological information

Ecotoxicity

20 - 50% of the mixture consists of components(s) of unknown hazards to the aquatic environment.

Component name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea

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Ethylene glycol 107-21-1		27540: 96 h Lepomis macrochirus mg/L LC50 static	EC50 = 10000 mg/L 16 h EC50 = 620 mg/L 30 min EC50 = 620.0 mg/L 30 min	46300: 48 h Daphnia magna mg/L EC50
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Persistence and degradability No information available.

Bioaccumulation No information available.

Mobility No information available.

Component name	Partition coefficient
Ethylene glycol 107-21-1	-1.93

Other adverse effects No information available.

SECTION 13: Disposal Considerations.

Waste treatment methods

Disposal of wastes Disposal should be in accordance with applicable regional, national and local laws and regulations.

Waste from residues/unused products Disposal should be in accordance with applicable regional, national and local laws and regulations.

Contaminated packaging Disposal should be in accordance with applicable regional, national and local laws and regulations.

SECTION 14: Transport information

DOT Not regulated

TDG Not regulated

IATA Not regulated

IMDG Not regulated

SECTION 15: Regulatory information

International Inventories

Component name	TSCA	EINECS/ELINCS	DSL/NDSL	PICCS
Water 7732-18-5	Present	X	X	X
Ethylene glycol 107-21-1	Present	X	X	X
Aluminum Sulfate 10043-01-3	Present	X	X	X
Glacial Acetic Acid 758-12-3	-	X	-	-
Sodium Iodate 7681-55-2	Present	X	X	X
Hematoxylin 517-28-2	Present	X	X	X

Component name	ENCS	IECSC	AICS	KECL
Water 7732-18-5	Present	X	X	Present

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Ethylene glycol 107-21-1	Present	X	X	Present
Aluminum Sulfate 10043-01-3	Present	X	X	Present
Sodium Iodate 7681-55-2	Present	X	X	Present
Hematoxylin 517-28-2	Present	X	X	Present

Legend

X - Present

- Not Listed

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

PICCS - Philippines Inventory of Chemicals and Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

AICS - Australian Inventory of Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

US Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

Component name	CAS No	%	SARA 313 - Threshold Values %
Ethylene glycol - 107-21-1	107-21-1	18% - 28%	1.0

SARA 311/312 Hazard Categories

Acute health hazard	Yes
Chronic Health Hazard	No
Fire hazard	No
Sudden release of pressure hazard	No
Reactive Hazard	No

CWA (Clean Water Act)

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302).

Component name	Hazardous Substances RQs	CERCLA/SARA RQ	Reportable Quantity (RQ)
Ethylene glycol 107-21-1	5000 lb		RQ 5000 lb final RQ RQ 2270 kg final RQ

US State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

This product may contain substances regulated by state right-to-know regulations.

Component name	New Jersey	Massachusetts	Pennsylvania
Ethylene glycol 107-21-1	X	X	X
Aluminum Sulfate 10043-01-3	X	X	X

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

International Regulations

Canada

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the SDS contains all the information required by the CPR.

WHMIS Hazard Class

Non-controlled

Mexico

No information available

Component name	Carcinogenicity	Exposure Limits
Ethylene glycol	-	Mexico: Ceiling 100 mg/m ³

SECTION 16: Other information

Prepared By Hologic Inc
Revision Date 06-May-2022

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The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet