



# SAFETY DATA SHEET

## Section 1 Product and Company Identification

**Chemical Product or Sample Name:** TrueClot® Blood Simulant Clotting Solution

**CAS Number:** Mixture

**Synonyms:** None

**Recommended Use(s):** Medical training; research and development

**Company Information:** Luna Innovations Incorporated  
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## Section 2 Hazards Identification

### **EMERGENCY OVERVIEW**

#### Hazardous Materials Identification System (HMIS III)

<b>Physical state:</b> Liquid	<b>HEALTH:</b> 0
<b>Color:</b> clear	<b>FLAMMABILITY:</b> 0
<b>Odor:</b> None	<b>PHYSICAL HAZARDS:</b> 0
	<b>Personal Protective Equipment:</b> See SDS Section 8.
<b>Health Hazard</b>	POSSIBLE SKIN AND EYE IRRITANT
<b>Signal Words /</b>	
<b>Route of Entry:</b>	
<b>Other Hazards /</b>	NONE
<b>Comments:</b>	

**OSHA /HCS Status:** This material is not considered to be hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

### **POTENTIAL HEALTH EFFECTS**

**Potential routes of entry:** Eyes, skin lesion.

**Inhalation:** N/A

**Skin Contact:** May cause skin irritation

**Eye Contact:** May cause eye irritation

**Ingestion:** Avoid ingestion, unknown effects.



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Existing conditions aggravated by exposure: N/A

See Section 11 for additional toxicological information

**POTENTIAL ENVIRONMENTAL EFFECTS**

Unknown

**Section 3 Composition and Information on Ingredients**

Nanomaterial or contains nanomaterials (engineered) with at least one dimension of <100 nm)? No

Component(s)	CAS #	Vol %
Water	7732-18-5	85-99%%
Proprietary Additive	N/A	1-15%

**Section 4 First Aid Measures**

**Eye Contact:** Rinse with water for 15 minutes, seek medical attention if irritation persists.  
**Skin Contact:** Rinse with soap and water, seek medical attention if irritation persists.  
**Inhalation:** N/A  
**Ingestion:** Do NOT induce vomiting unless directed to do so by medical personnel. Seek medical attention if symptoms appear.  
**Notes to physician:** N/A

**Section 5 Fire Fighting Measures**

See Section 9 for flammable properties.

**Special Fire Fighting Procedures:** None  
**Extinguishing media:** SMALL FIRE: Use DRY chemical powder. LARGE FIRE: Use water spray, fog or foam.  
**Protective Equipment:** None  
**Unusual Fire or Explosion Hazards:** None  
**Hazardous combustion products:** Unknown

**Section 6 Accidental Release Measures**

**Isolate the spill and deny entry to unnecessary and unprotected personnel.**

**Personal Protection:** Wear PPE per Section 8.  
**Spill Procedures:** Isolate spill and contain with absorbent materials.  
**Environmental Precautions and Cleanup Methods:** Do not put down drain and see Section 13. Dispose of in accordance with federal and state waste regulations

**Section 7 Handling and Storage**



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Precautions: None

Storage: None

### Section 8 Exposure Controls and Personal Protection

Engineering Controls/  
Ventilation: None

Eye Protection: Wear ANSI approved safety goggles/glasses if there is a risk of splashing.

Respiratory Protection: None

Skin Protection: Wear nitrile or latex gloves if user has sensitive skin or is prone to skin irritation.

### Section 9 Physical and Chemical Properties

Appearance (color, physical form, shape): Clear Liquid  
Odor Characteristics: Unknown  
Odor Threshold: Unknown  
pH: 7 – 7.5  
Flash Point: Unknown  
Flammability (solid, gas): Unknown  
Initial Boiling Point and Boiling Range: 100°C (estimated)  
Evaporation Rate: Unknown  
Melting/Freezing Point: Unknown  
Upper/Lower Flammability or Explosive Limits: Unknown  
Vapor Pressure: Unknown  
Vapor Density: Unknown  
Specific Gravity or Relative Density: Unknown  
Solubility (specify solvent): Soluble in water  
Auto-ignition Temperature: Unknown  
Decomposition Temperature: Unknown  
% Volatile: Unknown  
Partition Coefficient: Unknown  
Viscosity: Variable depending on formulation

### Section 10 Stability and Reactivity

Stability: N/A  
Hazardous polymerization: N/A  
Hazardous Decomposition: N/A  
Products:  
Incompatibilities: N/A  
Conditions to avoid: N/A

### Section 11 Toxicological Information

#### Carcinogenicity

Carcinogenic listed by IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.



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**Carcinogenic by NTP:** No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by NTP

**Carcinogenic by OSHA:** No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by OSHA

### Acute or Chronic Toxicity

**Acute Effects:** Administration of mixture (composed of similar but not identical components) produced very slight to well-defined erythema and very slight edema by the 1 hour scoring interval on when tested on intact and abraded skin of New Zealand white rabbits. Complete resolution of irritation occurred by the Day 7 scoring interval. Additional dermal observations included red staining of the test sites; however, the staining did not affect the ability to score the test sites. Mixture was score as a slight irritant by contract research laboratory.

**Chronic Effects:** Information not available

### Section 12 Environmental Information

**Ecotoxicological Information:** Unknown  
**Chemical Fate Information:** Unknown

### Section 13 Disposal Considerations

Material may be diluted and safely washed down a sink. Do not discard directly into any sewers, on the ground, or into any body of water. Upon completion of tests, dispose of material safely and in accordance with local, state, and federal regulations. It is the responsibility of the waste generator to determine the proper waste identification and disposal methods.

### Section 14 Transportation Information

#### DOT:

**Proper Shipping Name:** NOT REGULATED  
**Hazard Class:**  
**Packing Group:**  
**UN Number:**

#### IATA:

**Proper Shipping Name:** NOT REGULATED  
**Hazard Class:**  
**Packing Group:**  
**UN Number:**

### Section 15 Regulatory Information

**TSCA Inventory Status:** All Components of this product are TSCA listed.

### Section 16 Other Information

**Research Notice:** The information provided herein is for a research sample and represents the results of preliminary investigations. This research sample is for use by qualified research personnel only. It is



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offered in good faith, consistent with 29 CFR 1910.1200, recognizing that additional information, including data on hazardous properties, may be developed at a later time.



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