

## **SECTION 1: Identification**

1.1. Product Identifier

Trade Name or Designation: Starch Solution, 0.25% (w/v)

Preserved with Chloroform

**Product Number:** S-0012

Other Identifying Product Numbers: S-0012-3

1.2. Recommended Use and Restrictions on Use

General Laboratory Reagent

1.3. Details of the Supplier of the Safety Data Sheet

Company: Reagents Inc.

Address: 4746 Sweden Road

Charlotte, NC 28224 USA

Telephone: 800-732-8484

1.4. Emergency Telephone Number (24 hr)

CHEMTREC (USA) 800-424-9300 CHEMTREC (International) 1+ 703-527-3887

# **SECTION 2: Hazard(s) Identification**

#### 2.1. Classification of the Substance or Mixture (in accordance with OSHA HCS 29 CFR 1910.1200)

For the full text of the Hazard and Precautionary Statements listed below, see Section 16.

	Hazard		
Hazard Class	Category	Statement	Precautionary Statements
Carcinogenicity	Category 1	H350	P201, P202, P280, P308+P313, P405, P501
Reproductive Toxicity	Category 2	H361	P201, P202, P280, P308+P313, P405, P501

#### 2.2. GHS Label Elements

Pictograms:



Signal Word: Danger

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#### **Hazard Statements:**

Hazard Number	Hazard Statement
H350	May cause cancer.
H361	Suspected of damaging fertility or the unborn child.

#### **Precautionary Statements:**

Precautionary Number	Precautionary Statement
P201	Obtain special instructions before use.
P202	Do not handle until all safety precautions have been read and understood.
P280	Wear protective gloves and eye protection.
P308+P313	IF exposed or concerned: Get medical attention.
P405	Store locked up.
P501	Dispose of contents in accordance with local, state, federal and international regulations.

#### 2.3. WHMIS Classification

WHMIS classification is not included based on the recommended option (Option 4) found in the Canada Gazette Part II, Vol. 149, No.3, page 458

## 2.4. Hazards not Otherwise Classified or Covered by GHS

Data not available.

# **SECTION 3: Composition / Information on Ingredients**

#### 3.1. Components of Substance or Mixture

Chemical Name	Formula	Molecular Weight	<b>CAS Number</b>	Weight%
Water	H₂O	18.01 g/mol	7732-18-5	99.45%
Chloroform	CHCl₃	119.37 g/mol	67-66-3	0.30%
Starch, soluble	(C <sub>6</sub> H <sub>10</sub> O <sub>5</sub> )_n	Data not available.	9005-84-9	0.25%

# **SECTION 4: First-Aid Measures**

#### 4.1. General First Aid Information

**Eye Contact:** May cause slight irritation.

**Inhalation:** Not expected to require first aid. If necessary, remove to fresh air.

**Skin Contact:** May cause slight irritation to those allergic to phosphates.

**Ingestion:** Dilute with water or milk. Call a physician if necessary.

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### 4.2. Most Important Symptoms and Effects, Acute and Delayed

Non-flammable, non-toxic, non-corrosive. Does not present any significant health hazards. May cause irritation. Wash areas of contact with water. EYE CONTACT: May cause slight irritation. SKIN CONTACT: May cause slight irritation to those allergic to phosphates.

## 4.3. Medical Attention or Special Treatment Needed

Not expected to require special treatment.

## **SECTION 5: Fire-Fighting Measures**

#### 5.1. Extinguishing Media

Use any means suitable for extinguishing surrounding fire.

### 5.2. Specific Hazards Arising from the Substance or Mixture

Not considered to be a fire or explosion hazard.

### 5.3. Special Protective Equipment for Firefighters

Use protective clothing and breathing equipment appropriate for the surrounding fire.

#### **SECTION 6: Accidental Release Measures**

## 6.1. Personal Precautions, Protective Equipment and Emergency Procedures

Wear protective gloves and eye protection.

## 6.2. Cleanup and Containment Methods and Materials

Absorb with suitable material (vermiculite, clay, etc.) and dispose of in accordance with local regulations.

Check with local agencies for the proper disposal of phosphate containing solutions.

# **SECTION 7: Handling and Storage**

#### 7.1. Precautions for Safe Handling and Storage Conditions

Store locked up. As with all chemicals, wash hands thoroughly after handling. Avoid contact with eyes and skin. Protect from freezing and physical damage.

# **SECTION 8: Exposure Controls / Personal Protection**

#### 8.1. Control Parameters

Chemical Name	Limit Type	Country	Exposure Limit	Information Source
Chloroform (67-66-3)	TLV-TWA	USA	10 ppm TWA	ACGIH - Threshold Limit Values - Time
				Weighted Averages (TLV-TWA)
Chloroform (67-66-3)	PEL-Ceiling	USA	50 ppm Ceiling	U.S OSHA - Final PELs - Ceiling Limits
			240 mg/m³ Ceiling	

#### 8.2. Exposure Controls

Engineering Controls: No specific controls are needed. Normal room ventilation is adequate.

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Respiratory Protection: Normal room ventilation is adequate.

**Skin Protection:** Wear protective gloves and eye protection. Chemical resistant gloves. **Eye Protection:** Wear protective gloves and eye protection. Safety glasses or goggles.

## 8.3. Personal Protective Equipment

Wear protective gloves and eye protection. Normal room ventilation is adequate. Chemical resistant gloves. Safety glasses or goggles.

# **SECTION 9: Physical and Chemical Properties**

### 9.1. Basic Physical and Chemical Properties

**Appearance:** White translucent liquid

Physical State: Liquid

Odor: Data not available.

Odor Threshold: Data not available.

pH: Data not available.

Melting/Freezing Point: Approximately 0°C

Initial Boiling Point /Range: Approximately 100°C - Approximately 100°C

Flash Point: Data not available.

**Evaporation Rate:** Data not available.

Flammability: Data not available.

Flammability/Explosive Limits: Data not available.

Vapor Pressure: Data not available.

Vapor Density: Data not available.

Relative Density: 1.0

Solubility: Miscible

Partition Coefficient (n-Octanol/Water): Data not available.

Auto-Ignition Temperature: Data not available.

**Decomposition Temperature:** Data not available.

Viscosity: Data not available.

**ExplosiveProperties:** Data not available. **Oxidizing Properties:** Data not available.

# **SECTION 10: Stability and Reactivity**

## 10.1. Reactivity and Chemical Stability

Stable under normal conditions of use and storage.

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## 10.2. Possibility of Hazardous Reactions

Data not available.

#### 10.3. Conditions to Avoid and Incompatible Materials

Strong oxidizing agents.

### 10.4. Hazardous Decomposition Products

Will not occur.

## **SECTION 11: Toxicological Information**

## 11.1. Information on Toxicological Effects

#### **Acute Toxicity - Oral Exposure:**

Not applicable.

#### **Acute Toxicity - Dermal Exposure:**

Not applicable.

#### **Acute Toxicity - Inhalation Exposure:**

Not applicable.

#### **Acute Toxicity - Other Information:**

LD50, Oral, Rat: (Sodium Phosphate Dibasic) 17 gm/kg; LD50, Dermal, Rabbit: (Potassium Phosphate Monobasic) >4640 mg/kg; details of toxic effects not reported other than lethal dose value.

#### Skin Corrosion and Irritation:

Not applicable.

#### **Serious Eye Damage and Irritation:**

Not applicable.

#### **Respiratory Sensitization:**

Not applicable.

#### **Skin Sensitization:**

Not applicable.

#### Germ Cell Mutagenicity:

Not applicable.

#### Carcinogenicity:

May cause cancer. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves and eye protection. IF exposed or concerned: Get medical attention. Store locked up. Dispose of contents in accordance with local, state, federal and international regulations.

## Reproductive Toxicity:

Suspected of damaging fertility or the unborn child. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves and eye protection. IF exposed or concerned: Get medical attention. Store locked up. Dispose of contents in accordance with local, state, federal and international regulations.

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#### **Specific Target Organ Toxicity from Single Exposure:**

Not applicable.

#### **Specific Target Organ Toxicity from Repeated Exposure:**

Not applicable.

#### **Aspiration Hazard:**

Not applicable.

#### **Additional Toxicology Information:**

Data not available.

# **SECTION 12: Ecological Information**

## 12.1. Ecotoxicity

Not applicable.

## 12.2. Persistence and Degradability

Data not available.

#### 12.3. Bioaccumulative Potential

Data not available.

#### 12.4. Mobility in Soil

Data not available.

### 12.5. Other Adverse Ecological Effects

Data not available.

# **SECTION 13: Disposal Considerations**

### 13.1. Waste Treatment Methods

Data not available.

# **SECTION 14: Transportation Information**

## 14.1. Transportation by Land - Department of Transportation (DOT, United States of America)

Not regulated according to DOT Regulations.

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#### 14.2. Transportation by Air - International Air Transport Association (IATA)

UN Number: N/A

**Proper Shipping Name:** 

**Hazard Class:** 

**Packing Group:** 

**Hazard Placard Labels:** 

# **SECTION 15: Regulatory Information**

### 15.1. Occupational Safety and Health Administration (OSHA) Hazards

Not listed.

### 15.2. Superfund Amendments and Reauthorization Act (SARA) 302 Extremely Hazardous Substances

Chloroform (CAS # 67-66-3): 10 lb EPCRA RQ Chloroform (CAS # 67-66-3): 10000 lb TPQ

# 15.3. Superfund Amendments and Reauthorization Act (SARA) 311/312 Hazardous Chemicals

Chloroform (CAS # 67-66-3): 1 lb final RQ; 0.454 kg final RQ Chloroform (CAS # 67-66-3): 10 lb final RQ; 4.54 kg final RQ

#### 15.4. Superfund Amendments and Reauthorization Act (SARA) 313 Toxic Release Inventory (TRI)

Chloroform (CAS # 67-66-3): 0.1 % de minimis concentration

#### 15.5. Massachusetts Right-to-Know Substance List

Chloroform (CAS # 67-66-3): Carcinogen; Extraordinarily hazardous

### 15.6. Pennsylvania Right-to-Know Hazardous Substances

Chloroform (CAS # 67-66-3): Environmental hazard

Chloroform (CAS # 67-66-3): Environmental hazard; Special hazardous substance

Chloroform (CAS # 67-66-3): Present Water (CAS # 7732-18-5): Present

## 15.7. New Jersey Worker and Community Right-to-Know Components

Chloroform (CAS # 67-66-3): carcinogen

Chloroform (CAS # 67-66-3): sn 0388

Chloroform (CAS # 67-66-3): SN 0388 TPQ: 500 lb

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#### 15.8. California Proposition 65

Chloroform (CAS # 67-66-3): 20 µg/day NSRL (oral); 40 µg/day NSRL (inhalation)

Chloroform (CAS # 67-66-3): carcinogen, initial date 10/1/87

Chloroform (CAS # 67-66-3): developmental toxicity, initial date 8/7/09

## 15.9. Canada Domestic Substances List / Non-Domestic Substances List (DSL/NDSL)

Chloroform (CAS # 67-66-3): Present Water (CAS # 7732-18-5): Present Starch, soluble (CAS # 9005-84-9): Present

### 15.10. United States of America Toxic Substances Control Act (TSCA) List

Chloroform (CAS # 67-66-3): Present Water (CAS # 7732-18-5): Present Starch, soluble (CAS # 9005-84-9): Present [XU]

# 15.11. European Inventory of Existing Commercial Chemical Substances (EINECS), European List of Notified Chemical Substances (ELINCS), and No Longer Polymers (NLP)

Not listed.

#### **SECTION 16: Other Information**

#### 16.1. Full Text of Hazard Statements and Precautionary Statements

May cause cancer. Suspected of damaging fertility or the unborn child.

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves and eye protection.

IF exposed or concerned: Get medical attention.

Store locked up.

Dispose of contents in accordance with local, state, federal and international regulations.

#### 16.2. Miscellaneous Hazard Classes

Canadian Carcinogenicity Hazard Class: Not Applicable.

Physical Hazards Not Otherwise Classified (PHNOC): Not Applicable.

Health Hazards Not Otherwise Classified (HHNOC): Not Applicable.

Biohazardous Infectious Materials Hazard Class: Not Applicable.

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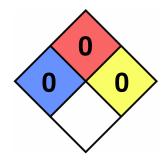
# 16.3. National Fire Protection Association (NFPA) Rating

Health: 0

Flammability: 0

Reactivity: 0

**Special Hazard:** 



#### 16.4. Document Revision

Last Revision Date: 8/31/2015

# **DISCLAIMER**

When handled properly by qualified personnel, the product described herein does not present a significant health or safety hazard. Alteration of its characteristics by concentration, evaporation, addition of other substances, or other means may present hazards not specifically addressed herein and which must be evaluated by the user. The information furnished herein is believed to be accurate and represents the best data currently available to us. No warranty, expressed or implied, is made and REAGENTS, INC. assumes no legal responsibility or liability whatsoever resulting from its use.

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